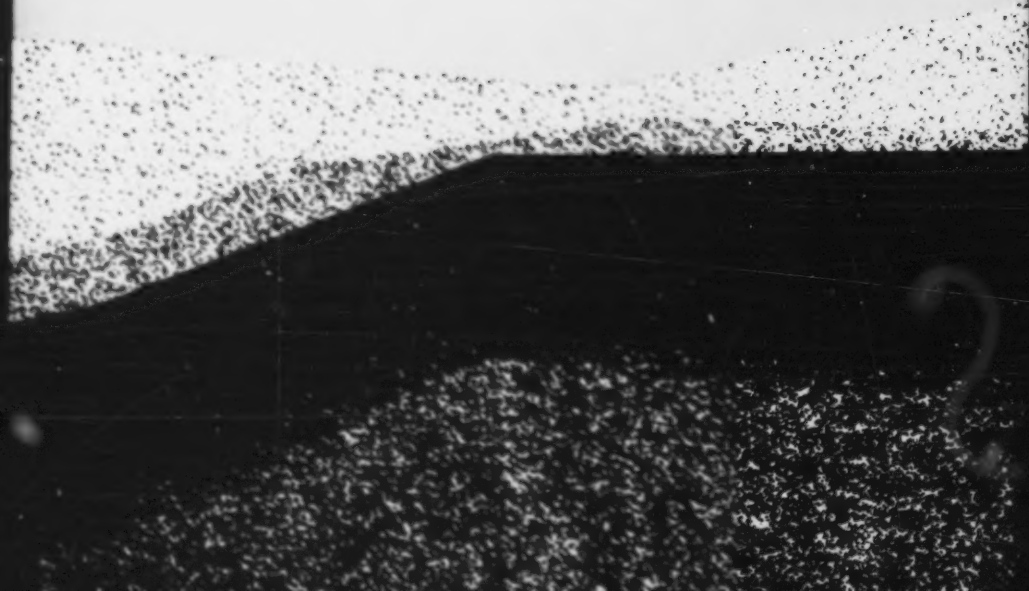


**Canadian Mineral Policy
Past and Present:
The Ambiguous Legacy**

DAVID YUDELMAN



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PREFACE

Mineral policy is an area of government activity which has been of crucial importance to Canada from its earliest history. Frequently it appears to have evolved in response to specific needs and pressures, in a very piecemeal manner and with no coherent order or plan. This study, however, by examining systematically the origins and rationale of Canadian mineral policy, succeeds in identifying the continuity of trends over time, and analyzing some of the underlying forces shaping ostensibly random governmental actions. Drawing on this historical analysis, the author takes a close and critical look at the more focused and self-conscious mineral policy initiatives of recent years, and draws some interesting conclusions with respect to future policy directions.

The Centre for Resource Studies presents the results of scholarly research in non-specialist terms, and in a form readily accessible to policy makers and other interested groups. We are pleased to offer this study, in the hopes that it will provide useful insights drawn from past experience that can be applied in the process of developing effective mineral policies for Canada in the future.

Views expressed are those of the author, and do not necessarily represent the views of the Centre for Resource Studies or its sponsors.

David L. Anderson
Executive Director
Centre for Resource Studies

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Foreword

The western industrial economies are faced today with fundamental problems of restructuring, and adjustment to a harsh and competitive new world. The issue is one on which Canada, quite justifiably, is doing a great deal of soul-searching: the Royal Commission on the Economic Union and Development Prospects for Canada, scheduled to report in mid-1985, is only one facet of a remarkable series of public consultations, discussion papers and widespread representations to society at large – and to each other – by business, government, labour and various other groups.

To move from soul-searching to analysis, however, is a task facing Canada's policy-makers which has not yet been fully addressed. Canada has many unique problems in the area of economic restructuring which are not addressed in the burgeoning OECD literature on the topic. In particular, the mixed dependence of its economy on resource and manufacturing industries has yet to be fully confronted in formulating economic development policy.

For these reasons, among others, Canadian mineral policy is, and must be, an important part of the debate. Thus, while this study outlines the history of Canadian mineral policy partly because of its intrinsic interest, its object is also to provide some guidelines to the problems of the present and future. The results are by no means unambiguous, but it is hoped that they will be of some help in illuminating the Canadian variant of the international restructuring dilemma.

Many people read this manuscript or previous drafts and helped correct some of its wilder fancies, among them David Anderson, Keith Buck, Patrick Caragata, Marsha Chandler, Brian Mackenzie, George Miller, Keith O'Brien, Michael Webb and Margot Wojciechowski. Others, too numerous to mention, read and commented on parts of it. I would like to thank them all for their help, without which this study would probably never have been completed.

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Summary

Mineral policy has been a pivotal issue in the Canadian economy from at least the mid-nineteenth century, and its history is of crucial relevance to policy formulation today. But its legacy is ambiguous. On the one hand, the present cannot be fully understood nor the future adequately planned for without a clear grasp of the past; on the other hand, it is both common and dangerous to be trapped by the horizons of the past. Those who wish to make mineral policy today are compelled, not only to avoid the mistakes of the past, but to avoid uncritically applying the successful solutions of the past to a present which has new imperatives.

The fundamental issues confronting Canadian mineral policy have been remarkably constant throughout its history:

- how large should the industry be, and how fast should it grow?
- how shall the benefits of mining be distributed?
- how shall costs be distributed?

The broad goals of policy arising from these issues, by contrast, have changed radically over the years. Until World War II, Canadian mineral policy was concerned with encouraging the development of the fledgling mining industry while establishing the ownership of mineral resources (public-private, federal-provincial and national-international). These were partially contradictory goals and led to a policy marked by frequent shifts between growth and distribution priorities; but by World War II the constitutional and institutional framework of Canadian mineral policy had been established. From 1945 to about 1970, Canadian mineral policy aimed unequivocally at growth and, helped by a number of favourable external circumstances, was remarkably successful. From 1970 to 1978, however, a mineral policy of redistribution became paramount. Governments grew in size and pervasiveness, became increasingly more interventionist and exhibited an apparently insatiable revenue thirst. The Canadian mining industry – helped by the international escalation of commodity prices – boomed in the early 1970s. Partly as a result, it became a major victim of growing interventionism. From 1975, a downturn in the industry made it clear that the goose which laid the golden eggs was itself in danger and prompted some relaxation of redistribution policies directed against the industry. Between 1978 and 1982, mineral policy was largely placed on hold while Canadian resource policy in general was fundamentally reconsidered and, in some cases, overhauled. An economic development strategy tenta-

tively emerged, emphasizing the exploitation of Canada's comparative advantages in natural resources, their intensified linkage to high technology, and their centrality to the goal of regional development and employment creation. From 1982, after the publication of a major but abortive federal discussion paper on mineral policy, a new mineral policy of maturity management began to emerge, focusing on stabilization and adjustment issues such as international marketing, market access, and productivity.

Possible future developments of mineral policy need to be considered in the light of past events. Two major policy instruments of the late 1980s and early 1990s are likely to be productivity management (especially via research and development, and innovation) and synergy management (the achievement of external economies, in particular through the use of procurement, regional and trade instruments). The mining industry's rapid adjustment to the brutal competitive realities of the 1980s has been a model of industrial restructuring, and partly the result of the painful but salutary absence of significant safety nets or bailout programs from Canadian governments. The restructuring is by no means over, however, and mineral policy has to take care to continue to encourage it and to avoid changes, however motivated by the desire to mitigate the plight of a depressed industry, which will slow the adjustment process.

In the nineteenth century, the private sector frequently played a more pro-active role in policy formulation – aligning its own interests imaginatively with broader trends in economic policy – than it has played in the 1970s and 1980s. For its own sake, and for that of mineral policy as a whole, it should now seek to participate actively and constructively in formulating the agenda for mineral policy and tying it to overall economic development policy. Merely reacting to the initiatives of others is no longer sufficient.

Résumé

Depuis le milieu du dix-neuvième siècle au moins, la politique minérale a été au coeur de l'économie canadienne et son histoire est étroitement liée à l'élaboration de la politique d'aujourd'hui. Mais le legs qu'elle nous laisse est ambigu. D'une part, on ne peut ni comprendre pleinement le présent ni planifier convenablement l'avenir si l'on n'a pas une bonne connaissance du passé. D'autre part, il est à la fois courant et dangereux de se laisser prendre au piège que représentent les horizons du passé. Ceux qui s'occupent de politique minérale aujourd'hui se voient obligés non seulement d'éviter les erreurs du passé, mais d'éviter de recourir systématiquement aux solutions couronnées de succès dans le passé car ce sont des besoins bien différents qui se font sentir aujourd'hui.

Les problèmes fondamentaux qui caractérisent la politique minérale canadienne ont été remarquablement constants au cours de son histoire:

- de quelle taille devrait être l'industrie et avec quelle rapidité devrait-elle croître?
- comment les profits miniers seront-ils répartis?
- comment les coûts seront-ils répartis?

Par contre les objectifs généraux de la politique découlant des ces problèmes ont subi des changements radicaux au cours des années. Jusqu'à la Deuxième Guerre, la politique minérale canadienne se préoccupait d'encourager le développement de l'industrie minière naissante tout en déterminant les droits de propriété des ressources minérales (publics-privés, fédéraux-provinciaux, et nationaux-internationaux). Ces objectifs étaient en partie contradictoires et ont résulté en une politique marquée par de nombreux changements dans les priorités de croissance et de répartition; mais au moment de la Deuxième Guerre, le cadre constitutionnel et institutionnel de la politique minérale canadienne avait été formé. De 1945 à 1970 environ, la politique minérale canadienne visa très nettement la croissance, et grâce à un certain nombre de circonstances extérieures les succès fut marqué. De 1970 à 1978 cependant une politique minérale de redistribution prit une importance de plus en plus grande. Les gouvernements s'agrandirent et devinrent omniprésents, adoptèrent des politiques de plus en plus interventionnistes et firent preuve d'une soif apparemment inassouissable de revenus. L'industrie minière canadienne connut au début des années 70 un essor considérable d'autant plus que les prix internationaux des marchandises n'arrêtaient de grimper. C'est en partie à cause de

cela qu'elle devint une victime importante d'un interventionnisme croissant. À partir de 1975 un mouvement en sens inverse dans l'industrie révéla clairement que la poule aux oeufs d'or était elle-même menacée, ce qui entraîna un relâchement des politiques de redistribution dirigées contre l'industrie. Entre 1978 et 1982, la politique minérale resta essentiellement inchangée alors que les principes fondamentaux sur lesquels était basée la politique des ressources canadienne faisaient l'objet d'un nouvel examen et étaient révisés dans certains cas. Il s'en dégagait une tentative de stratégie de développement économique qui mettait l'accent sur l'exploitation des avantages relatifs qu'avait le Canada en ce qui concerne les ressources naturelles, sur leur lien de plus en plus étroit avec la haute technologie et sur le fait qu'elles joueraient un rôle crucial dans le développement régional et la création d'emplois. À partir de 1982, après la publication d'un document fédéral de discussion sur la politique minérale qui s'avéra important mais fut voué à l'échec, on vit apparaître une nouvelle politique minérale de gestion des échéances qui se concentrait sur les problèmes de stabilisation et d'ajustement tels que le marketing international, l'accès aux marchés et la productivité.

Les éventuels développements futurs de la politique minérale doivent être examinés à la lumière des événements passés. Deux moyens d'action importants dans la politique minérale de la fin des années 80 et du début des années 90 seront sans doute la gestion de la productivité (surtout par la voie de la recherche et du développement ainsi que de l'innovation) et la gestion synergique (la réalisation des économies extérieures, en particulier par l'acquisition et moyens d'action régionaux et commerciaux). L'ajustement rapide de l'industrie minière à la féroce concurrence des années 80 a été un modèle de restructuration industrielle et résulte en partie de l'absence douloureuse mais salutaire de filets de protection ou de programmes de sauvetage de la part des gouvernements canadiens. La restructuration est loin d'être terminée cependant et la politique minérale doit veiller à continuer de l'encourager et à éviter les changements, même ceux qui seraient motivés par le désir de venir en aide à une industrie en difficulté, ce qui ralentirait le processus d'ajustement. Au dix-neuvième siècle, le secteur privé jouait souvent un rôle plus actif que dans les années 70 et 80 dans l'élaboration de la politique tout en trouvant moyen de faire coïncider ses propres intérêts avec les tendances plus générales de la politique économique. Dans son propre intérêt et dans celui de la politique minérale dans son ensemble, il devrait maintenant chercher à participer de façon active et constructive à l'élaboration d'un programme pour la politique minérale en la liant à la politique de développement économique générale. Se contenter de réagir aux initiatives d'autrui ne suffit plus.

1. Introduction

This study is both a short, selective history of Canadian mineral policy, and an analysis of contemporary mineral policy. It is not, therefore, a history of Canadian mining *per se* and does not claim to be in any way comprehensive, although there is a decided need for definitive histories of both Canadian mining and mineral policy.

The objectives of the study are:

- to pull together scattered, and largely published, material on the early history of Canadian mineral policy to provide an essential context for contemporary developments (and in the hope that this might encourage more comprehensive and definitive efforts by others);
- to examine the relationship of historical mineral policy to that of the 1970s and 1980s, and outline some of the ambiguous lessons provided to policymakers by history;
- to attempt an analysis of contemporary mineral policy, focusing particularly on its relationship with the shifting imperatives of overall economic development policy; and
- to draw some tentative policy conclusions.

The contemporary situation of the Canadian mining industry, its need to take definite and directed measures to survive, let alone prosper, in an international environment which is unprecedented in its competitiveness, calls for new approaches and solutions in mineral policy. Nevertheless, however important the call for novelty in policy, it must be pointed out that many of the contemporary issues are over 80 years old and have engaged some of the best minds in Canada for many years. There is much to learn in the present from the successes and failures of the past.

This is not to argue that it is possible to apply the solutions of the past directly to the present. History rarely, if ever, repeats itself that precisely. Its lessons are as profoundly ambiguous as they are unavoidable. Those who wish to make policy (or history) are compelled not only to attempt to avoid the mistakes of the past, but also to avoid uncritically applying the successful solutions of the past to a present which has new imperatives and goals. To do this, they need to know

- how general goals of policy have been translated into action at particular times by specific policy instruments;

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- how and to what extent goals have changed in response to broader economic and social issues;
- how and to what extent policy instruments have changed in response to changes of goals.

Policy Goals and Instruments

Mineral (or any) policy has two basic prerequisites if it is to be successful: its goals must be adequately defined, feasible, and mutually consistent; and its instruments must be adequate to achieve the goals for which they are established. Knowledge of the history of mineral policy can help avoid problems in both areas. In the case of defining goals, history identifies what was sought in the past and how feasible and coherent it was, and sharpens perceptions of precisely what changes are needed in the present. In the case of the adequacy of policy instruments, the history indicates both the purpose and the efficiency of specific instruments in the past in relation to specific goals. The tendency of policy instruments to take on a life of their own and operate unchanged even though they are no longer fully appropriate to the new goals of policy can thus be fairly easily identified. Knowing what to avoid, of course, does not in itself tell one what to do and how to do it; but it is an essential first step.

Historically, the fundamental policy issues confronting the Canadian mining industry (or most industries in most countries) are relatively few. What is the optimum growth rate and size for the industry? How shall the benefits of mining be distributed within the Canadian economy and society? How shall the costs be distributed? The policy responses to these issues can be divided into goals (should one attempt to maximize growth, stabilize the industry, or organize its contraction?) and into instruments (how does one best achieve these goals?)

It is notable that policy instruments originally designed under one type of mineral policy, to meet specific goals of that policy, are frequently retained under a new mineral policy, to meet very different goals. For example, a mineral policy of growth, particularly after World War II, used the provision of infrastructure by government to maximize the size, rate and spread of industry growth. By contrast, the mineral policy of redistribution of the 1970s placed a greater burden on the mining companies to finance infrastructure. The policy objective, in reversing the application of this policy instrument, was not to reverse the previous goal of industry growth: economic contraction was not the aim. Rather, the shifting of the burden addressed an entirely different issue: how to redistribute the costs of mining to compel the industry, rather than society as a whole, to make a greater contribution to the social costs surrounding mining enterprise. The effect of this measure, however, (although this is by the nature of the problem

impossible to prove in hard statistics) was not merely the desired one: whatever its intention, its effect was almost certainly to introduce instability into the long-range planning process in the industry, and to impede its growth.

Not only are policy instruments sometimes retained to achieve new policy goals for which they are not fully appropriate, they are sometimes retained even though they contradict the central goals of a mineral policy. For example, under the mineral policy of redistribution of the 1970s there was a gradual tightening of investment controls over foreign capital in mining as well as other sectors. The policy never became draconian or even seriously obstructive in the mining sector, but it was annoying to those foreigners who had experienced the previous open-door policy. Although it became a policy priority in the early 1980s to create a favourable climate for investment in mining, foreign investment controls were not removed and became a handy excuse for the withdrawal or withholding of capital by those who were in any case not strongly motivated to invest at a time of plunging commodity prices.

In making mineral policy, then, it is important to know the history of various policy instruments, which goals they were originally meant to serve, and whether they remain fully appropriate when the original goal is superseded. Even more important, however, is the need to have a definite and coherent goal or set of goals to which policy instruments are to be subordinated. For example, it is quite legitimate to be concerned with controlling foreign ownership of Canadian mining in certain situations and under certain policy regimes; but it is contradictory to maintain high-profile policy instruments to do this when a major policy priority is to create a favourable investment climate. A government that acts in this way is either sabotaging its own goals or not genuinely committed, as a priority, to increasing investment.

The history of mineral policy demonstrates that it is necessary for governments to have a fairly firm grasp of their priorities if they are to avoid merely contingent and unrelated responses to issues as they arise. Mineral policy must plan to avoid fires breaking out, and not merely rush from one fire to the next, extinguishing each on the run, while the residents either move out or are forced to spend excessive amounts on insurance. Canadian mineral policy in the 1970s and 1980s, it is argued below, was frequently too reliant on fire-fighting and is only now beginning to re-establish some of its priorities and to act on them in a concerted and consistent way.

This is not to argue that it is essential that a policy be consistent in all respects, and rigidly enforce its priorities. No matter how important foreign investment might be, for example, no reasonable mineral policy would (or should) accept it completely uncritically and without strings. Nor is it to argue that governments should be compelled to publish and stick to a comprehensive, logical and coherent 'mineral policy'.

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The history of mineral policy shows that even governments which follow the most ordered set of priorities need the flexibility to proclaim their ardent acceptance of contradictory policy imperatives (and, to a limited extent, to put them into practice) when it is politically expedient to do so. Thus we find governments which follow a strong policy of growth will continue to emphasize their total commitment to protecting the environment and native peoples, capturing resource rents 'for the Canadian people' and restructuring the economy away from hewing wood and drawing water. Conversely, governments set on redistribution continue to promise growing job opportunities in mining towns, the minimizing of government regulation, and undying support for the ongoing growth of the industry.

It is unrealistic, therefore, to expect a government to operate continually with all its cards on the table. Moreover, it is possible to take this even further, and argue that government policies are not fully comprehensible or predictable in advance to governments themselves because they are not merely goals, but goals plus instruments interacting over time. Policies, it is argued by some, are the actual course of action followed by governments over significant periods of time, and can only be identified by a close historical examination of the interaction of government and other groups, such as the mining industry. This view puts the historian, or policy analyst, in a privileged position to contribute to policy formulation:

...policy does not seem to be a self-defining phenomenon: it is an analytic category, the contents of which are identified by the analyst rather than by the policy-maker or pieces of legislation or administration. There is no unambiguous datum constituting policy waiting to be discovered by the world. Policy may usefully be considered as a course of action or inaction rather than specific decisions or action, and such a course has to be perceived and identified by the analyst in question. Policy exists by interrogating rather than intuiting political phenomena.¹

Scope and Method of the Study

This study attempts to identify broad historical trends in Canadian mineral policy, the continuities and changes in the goals of different policy regimes, and the shifting relationship of goals to instruments over time. Having done this, it attempts to identify the current emergence of a new mineral policy focusing on managing maturity. In this way it is hoped to tentatively pinpoint some of the priority areas – such as regional policy, diversification policy, and integration of mining into an economic growth policy orientated towards high technology – while showing how they differ from (and are

1. Hugh Hecla, 'Policy Analysis: Review Article', *British Journal of Political Science*, vol. 2, 1972, pp. 83-108.

similar to) traditional related concerns such as further processing and import substitution.

It is worth repeating that the study is a history of mineral policy rather than a history of mining. It does not claim to be comprehensive. In examining some issues, notably provincial mineral policies, it uses a case study approach, focusing on Ontario in its early period as representative of a range of perennial issues confronting the provinces. The case study approach is also used in examining the early development of the issues of further processing, Canadian ownership, and government intervention in the 'national interest': the early history of Inco and the nickel issue is used to illustrate these more general issues.

Chapter 2 attempts to identify the fundamental early issues which shaped Canadian mineral policy up to World War II and continue, in subtly altered forms, to shape it today: the ownership of natural resources, whether by public or private sectors or by federal or provincial governments; the relationship between growth of the industry and distribution of its benefits; and the contrasting claims on mineral policy exerted by provincialism, nationalism and internationalism.

Chapter 3 identifies the dominant policy from 1945 (or earlier) to 1970 as a mineral policy of growth. The growth of mining was paralleled by a growth of governments, both federal and provincial, and a gradual increase in direct government intervention, for economic, regional, nationalist and strategic reasons.

Chapter 4 argues that a mineral policy of redistribution begins to emerge in 1970, continuing to about 1978. This policy was cloaked by government claims to be moving from a focus on the 'quantity' to the 'quality' of development, and was connected to the attempt by governments to play a more 'pro-active' role in shaping the industry's goals and actions rather than acting, as they had traditionally, as facilitators. Federal and provincial governments shared an interest in the policy of redistribution, particularly in view of the expansion of governments, their expanded social goals, and the revenue thirst it created, and a major but ultimately unsuccessful effort was made to formulate a joint federal-provincial mineral policy.

Chapter 5 attempts to show how the original impetus for federal-provincial cooperation became its downfall: both levels of government attempted to increase radically their share of revenues generated by the industry; a clash resulted when some provincial governments also attempted to invade federal tax space. The mining industry was caught in the middle and it was not until 1978 that the three protagonists worked out an agreement acceptable to all. Taxation of the industry swung from low relative to other industries in the early 1970s, to exceptionally high in the mid 1970s, in some cases punitively high, and back to lower than average from 1977 (see table 7). This struggle over fiscal policy overlaid a number of

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other issues, particularly constitutional issues of jurisdiction over mineral policy.

Chapter 6 examines developments in Canadian resource policy generally, and how they related to mineral policy over the period 1978-82. An extended debate was held at federal Cabinet level about the proper role for Canadian resources in the formulation of a new economic development strategy. Gradually a consensus emerged that Canada should utilize whatever comparative advantage it might have in natural resources, including mining, to foster regional and high-technology development. Mining was one of four resource sectors for which the federal cabinet specifically requested a new policy document. The new federal development policy initiative put forward some thought-provoking goals, but was weak on the instruments for achieving them.

Chapter 7 outlines the import and impact of the major federal government report on mineral policy published in 1982, suggesting that the document was more a list of individual policy concerns than the outline of an overall policy. The chapter identifies a subsequent emergence of a new mineral policy of managing maturity, focusing on stabilization and adjustment issues such as international marketing, market access, and productivity. Some of the major policy instruments to achieve these goals are identified as research and development, trade and competition, procurement, and regional development policies. These instruments share a great deal in common with traditional mineral policy instruments, such as import substitution, local production, and further processing; but significant differences are also pointed out.

A coherent national mineral policy of managing maturity has not yet emerged, but it is suggested in chapter 7 that there are increasing signs that the new focus might turn out to be enduring. The new federal Conservative government has not yet published any comprehensive economic development strategy or mineral policy, though it has indicated an orientation towards growth led by the private sector, and a support for the revitalization of the export industries including mining. This policy is consistent with that advanced by the Liberals in 1981, but only partially implemented, which advocated a resource-led diversification and regional growth policy in which mining would play an important (albeit not a growing) role. Differences might lie in the Conservative preference for playing a supportive, rather than interventionist, role; but these are marginal. The major difference might turn out to be that the Conservatives take the resource-led growth policy more seriously than the Liberals did, and distance themselves more emphatically from earlier Liberal policy favouring manufacturing over resource sectors. Finally, the acid rain issue is considered briefly in chapter 7, not because of its innate importance, but as an example of the convergence of a number of important resource policy issues, including:

- the need to coordinate public and private sectors in formulating and implementing mineral policy, and to achieve cooperation between them;
- the use of high technology for specific applications in the traditional resource industries;
- the potential of technological innovation in upgrading both the economic efficiency and social acceptability of the industry; and
- the crucial importance of fully thinking through the goals and instruments of mineral policy, both to make it consistent with general social and economic policies, and to contribute actively to those general policies.

The concluding chapter is a subjective assessment of the ambiguous legacy that the history of mineral policy passes down to the formulators of mineral policy in the 1980s. It identifies the newly emerging mineral policy of the 1980s and discusses both its goals and its instruments. With the help of table 9, these are contrasted with the goals and instruments of other mineral policies. It is suggested that the two major types of policy instruments of the 1980s are productivity management (especially R & D and innovation) and synergy management (the achievement of external economies, especially via procurement, regional, and trade instruments). The mining industry's rapid adjustment to the brutal competitive realities of the 1980s in cutting costs and increasing productivity – a model of industrial restructuring – is discussed in relation to emerging trends in taxation, including the possibly fruitless search for a 'neutral' tax system. The private sector of the industry, it is suggested, has played a reactive rather than a proactive role in policy formulation, to its own detriment and that of mineral policy as a whole.

2. The Foundations of Canadian Mineral Policy

Paradoxically, the enduring foundations of mineral policy were laid down for much of the area which became Canada long before mining became a really significant factor in the area's economic life. Until the 1860s, Canadian mining consisted of sporadic mineral extraction activities which had little impact on the national economy and did not really comprise a mining 'industry' as we understand the term today.

By the 1880s and 1890s there had been significant discoveries of gold (in British Columbia and Quebec), oil (Ontario), coal (Cape Breton), asbestos (Ontario) and copper-nickel (Ontario). But the industry was still essentially nomadic: even after 1900, alluvial gold recovery in western Canada exceeded in value all the other metals and industrial minerals produced in Canada. Capital-intensive hardrock mining remained in its infancy, producing less than 1 percent of gross national product.¹

To the mid-1800s, in fact, mining was insignificant in North America as a whole. Then the California gold rush of 1849 led to the opening up of British Columbia by prospectors, which in turn was indirectly responsible for British Columbia joining Confederation and for the opening up of the Canadian Pacific Railway in 1885.² By 1900, British Columbia was the premier mining province of Canada, with a significant input of capital and prospectors from the United States.

Although Canadian mining did not make a significant contribution to the economy until the last hundred years, the origins of the mineral policies which guided its development date back to the earliest European settlement. It is important to trace at least some aspects of these origins if one is to understand the foundations on which modern Canadian mineral policy is built, and if one is to understand its structural and historical parameters. The early history is crucial and has an enduring influence, shaping and limiting subsequent developments right up to the present:

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1. John Davis, *Mining and Mineral Processing in Canada*, (Ottawa: Royal Commission on Canada's Economic Prospects, 1957) p. 9, p. 333. See also J-P Drolet and R. B. Toombs, 'The Influence of the Mineral Industry on the National Economy', presented to the Royal Society of Canada symposium on Earth Sciences in Canada, June 6-7, 1967; Canada, Department of Trade and Commerce, *Chronological Record of Canadian Mining Events from 1604 to 1947 and Historical Tables of the Mineral Production of Canada*, (Ottawa: Dominion Bureau of Statistics, 1948).
 2. Davis, *Mining and Mineral Processing in Canada*, p. 335-42.

The effect of public policy seems to be strong in the early period of the industry's growth, but is considerably weakened once the structure and the location of an industry have been settled and the industry approaches maturity. Attempts to change the location or concentration of the industry in the public interest usually require such drastic measures that they are not politically feasible.³

The colonial and constitutional legacy accumulated from the 1700s remains important today. Many of the issues of the early period remain perennial issues: their outward manifestation might have changed over time, but their underlying content has remained surprisingly constant. Mineral policy is concerned with the role of mining and processing in economy and society. The following are four of the fundamental historical issues arising over the period from the nineteenth century to 1945, which continue to recur in various forms and shape of mineral policy today:

- i mineral ownership – public and private;
- ii mineral ownership – provincial and federal;
- iii economic growth and distribution;
- iv nationalism and internationalism.

It is not proposed to attempt a detailed history of these issues here but some of their salient features are outlined below.

Mineral Ownership: Public and Private

The basic starting question of all mineral policy, the question from which all others flow, is 'who owns the resource?' Historically, the earliest owners of minerals were the king or monarch. In Egypt, Persia and China, for example, the actual miners were slaves or paid servants of the monarch.⁴ Non-monarchical societies later passed the ownership of their minerals to the community or its representative, the state. Still later, the individual discoverer of the mineral, or the miner, became recognized as the owner in some (but by no means all) societies. More recently, there has been a swing back to ownership by the community, manifested by international declarations such as that in 1962 by the United Nations General Assembly on Permanent Sovereignty over Natural Resources.⁵

In Canada, there has been a continuation of monarchical forms of ownership in which the government has played a definite controlling role in

3. O.W. Main, *The Canadian Nickel Industry: A Study in Market Control and Public Policy*, Toronto, 1955, p. 47.

4. W.G. Jeffery, 'Mining Legislation and Administration in Canada', Mineral Policy Sector Internal Report MR181 5, Department of Energy, Mines and Resources, Ottawa, 1981, p. 2.

5. *Ibid.*

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the area of the ownership of natural resources. The expression 'Crown lands' is only one visible form of the durability of monarchical structures. Crown ownership is a legacy of both British and French traditions. Both French seigneurial and British freehold land systems distinguish between possession of surface rights and ownership of minerals underground, and these traditions were transferred to North America.⁶

In England, the practice was to withhold only the royal metals (gold and silver) from the title deed. In Canada, however, the English extended royal reservation far beyond the traditional royal metals when, in 1791, Lord Dorchester was instructed to add coal, copper, tin, iron and lead to the underground minerals excluded from land title. This exclusion was, it has been pointed out, a principle rather than an operative policy because these minerals were not then available in economically exploitable quantities: 'But the law did exist and was nonetheless real, despite the absence of cause for its application'.⁷ The principle of reservation by the state for fiscal or public-interest reasons was passed down substantially unaltered to the post-Confederation province of Ontario.

Mining developed slowly in the early 1800s, and governments gradually made miners' access to Crown lands easier, in order to encourage exploration. Later, once the minerals were found, governments would once again seek to reassert the public stake in the minerals, but in such a way as to avoid frightening off investors. In this respect, there are significant similarities between the 1800s and 1900s.

In Ontario, the liberalization of reservation provisions was at first limited to the base ores, although access to the land was made easier for all the minerals (see below). In 1864, however, the first statute governing mining in Canada East and West, the 1864 Gold Mining Act, provided for the outright sale of lands containing gold ore, with full title to the gold going to the landowner.⁸ In 1866, the Gold and Silver Mining Act included a 2 percent to 10 percent royalty on gold and silver mined, but in 1869 this was repealed by the General Mining Act, which enabled any licensed prospector to obtain full ownership rights to subsurface minerals for \$1 an acre.

This act succeeded in encouraging development of gold, silver, copper and nickel from the Canadian shield, but it has been deplored by Nelles and others as enabling the mining industry to evade its social responsibilities and virtually giving away Canada's birthright.⁹ Nelles argues that 'special pleading eroded the power of the state'. However, it seems equally likely

6. H. V. Nelles, *The Politics of Development: Forests, Mines and Hydro-Electric Power in Ontario 1849-1941*, Toronto, 1975, p. 2-3.

7. *Ibid.*, p. 8.

8. *Ibid.*, p. 21-23. See also T. W. Gibson, *Mining in Ontario*, Toronto, 1937, p. 10, p. 11.

9. *Ibid.*, p. 21, p. 23, p. 24.

that the mining community – which he concedes was 'tiny' and not producing significant revenue – was simply unable to operate profitably under the preceding legislation. Given this, the government's decision would have been based rather on its need for revenue and employment opportunities, and its urgent need to expand these by encouraging accelerated mining development. In other words, the influence of the 'special pleaders' alone would have been insufficient; they needed the support of far more dispersed and powerful groups to impose their views on the government.

In 1888, five years after the discovery of the major copper-nickel deposit at Sudbury, the Ontario government established a Royal Commission¹⁰ to analyze the province's mineral resources and the part to be played by government in exploiting them. The commission's report deals at some length with the issue of who owns the subsurface minerals. It rejects the leasehold form of mining tenure as uncompetitive with the United States system of absolute title:

There are some persons who favour a return to the system of reservations and royalties abandoned and made void by the act of 1869...Those interests, having been surrendered by the Crown, cannot be regained except by purchase from the private holders, and justice would require the taking of the step if it was decided either to reserve minerals or impose duties upon them as conditions in the sale of public or mining lands hereafter...even if the policy of restricting or furthering the industry could be generally applied, no one can believe greater activity would follow...as long as mineral development in Ontario continues to depend largely upon investments of foreign capital, and especially of American capital, a liberal policy must be followed; mining lands must not be less free here than in the United States...¹¹

However compelling these legal and competitive arguments may have been, the Mowat government moved in exactly the opposite direction by reimposing the reservation of minerals on all sales of agricultural land and introducing a new form of tenure, a mineral lands lease. It also proposed a royalty system for various metals, which met with stiff opposition, was postponed for seven years, and then restricted to net profit rather than gross income as originally intended.

The shifts in even the most fundamental aspects of mineral policy – in this case, Ontario's – illustrate vividly how basic principles can be accommodated in the short term to contingent needs:

10. Ontario, *Report of the Royal Commission on the Mineral Resources of Ontario and Measures for Their Development*, Toronto, 1890. The Commissioners comprised a Member of Parliament, two bureaucrats, an academic and an 'explorer-miner'.

11. *Ibid.*, p. 305-6.

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By the end of the nineteenth century, Ontario mining policy had come full circle from the old monarchical royal metal reservation system, through a period of free mining and back to strict, centralized regulation featuring separation of surface from subsurface rights, retention of the latter by the Crown, and the imposition of royalties. . . The principle that a portion of the 'bounty of nature' properly belonged to the public had become one of the basic political values, opposed only by those with special vested interest.¹²

In spite of many later changes to royalty and other provisions of the mining code, the 'basic political value,' the principle of a public share in natural resources, has continued to apply throughout the 1900s for both Ontario and other provinces. It has had to be tempered, however, by the ever-present need to encourage the industry's further development.

Mineral Ownership: Provincial and Federal

The relationship of public and private sectors *vis-à-vis* mineral ownership remains a crucial factor in Canadian mineral policy. The issue predates the problem of federal-provincial jurisdiction; nevertheless, many accounts of Canadian mineral policy begin with the issue of federal-provincial jurisdiction in minerals. Federal-provincial issues tended to dominate from the 1970s, and this may account for any imbalance that exists in more recent accounts of Canadian mineral policy.

Whatever their relative importance, there can be little doubt that the three major actors in the process of making mineral policy are the private sector and the federal and provincial governments. It is vital to understand the constitutional and legal framework in which they operate. The Canadian framework is significantly different from that of most other mining countries:

A number of major mining countries have federal institutions, since federalism is almost a necessity in countries of large geographical extent, and the larger a country is, the more likely it is to have a resource base for a significant mining industry. In most federations, however, the central government is the legal owner of mineral resources (except to the extent that they are in private hands) and can dispose of these resources with little or no restraint or influence by subnational levels of government. Only Australia shares with Canada the not always enviable distinction of being an exception to this rule.¹³

12. Nelles, *The Politics of Development: Forests, Mines and Hydro-Electric Power in Ontario 1849-1941*, p. 30-1.

13. Garth Stevensen, 'The Process of Making Mineral Resource Policy in Canada', in Carl E. Beigie and Alfred O. Hero, Jr., *Natural Resources in U.S. Canadian Relations*, volume 1, *The Evolution of Policies and Issues*, Boulder, Colorado, 1980 pp. 168-9.

In Canada, the ownership is vested in the provinces. It was entrenched in Section 109 of the British North America Act (BNA Act) of 1867, which laid down that:

All lands, Mines, Minerals, and Royalties belonging to the several provinces of Canada, Nova Scotia and New Brunswick at the Union, and all sums then due and payable for such lands, Mines, Minerals and Royalties shall belong to the several Provinces of Ontario, Quebec, Nova Scotia and New Brunswick in which the same are situate or arise, subject to any Trust existing in respect thereof, and to any interest other than that of the Province in the same.

British Columbia, Prince Edward Island and Newfoundland later entered Confederation under similar terms. Alberta, Manitoba and Saskatchewan were formed out of federal lands, but the mineral rights to these provinces were ceded by the federal government to the provinces in 1930 to maintain balance and equity in the federal system. This was done somewhat reluctantly, even though the regions seemed to have little mineral potential at the time.

The BNA Act of 1867 was intended to entrench federal powers.¹⁴ Because of the rudimentary state of the development of the mining industry in the mid-19th century, Section 109 was not thought incompatible with this objective. But when the mining industry expanded rapidly in the twentieth century, Section 109 had the effect of significantly shifting the balance of power towards the provinces. All the provinces have, since 1930, been in similar positions with regard to ownership of land and resources, though the degree of control and its exact forms vary because of historical factors. Over 75 percent of Canada's provincial land areas are Crown land, and most mineral rights, including the rights to minerals found under private land, belong to the provinces. This is in spite of the alienation of rights which occurred far more intensively in the early areas of settlement, in eastern and central Canada. Federal land holdings in the provinces, by contrast, are under 2 percent of the total land area. The federal government's mineral ownership rights, then, are overwhelmingly concentrated in the territories, which explains why 'northern mineral policy' became increasingly important to the federal government in the early 1980s, though its rights there continue to be challenged in many areas by Indian and Inuit land claims.

The revenues from the provincial ownership of natural resources began to grow rapidly in the late nineteenth century, giving the provinces a greater

14 See Gerard V. LaForest, *Natural Resources and Public Property Under the Canadian Constitution*, Toronto, 1969, pp. 27-47; Wendy MacDonald, *Constitutional Change and the Mining Industry in Canada* (Kingston: Centre for Resource Studies, 1980); Garth Stevenson, 'The Process of Making Mineral Resource Policy in Canada', pp. 169-171, and Garth Stevenson, 'Federalism and the Political Economy of the Canadian State', in Leo Panitch (editor), *The Canadian State: Political Economy and Political Power*, Toronto, 1977, pp. 76-77. See also appendix 2.

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degree of autonomy *vis-à-vis* the federal subsidies, and also creating significant policy differences between the federal and provincial governments, which will be discussed in more detail below. The actual mechanics of provincial ownership were implemented differently in the various provinces, but the principle of provincial ownership itself has been vital in that it has been taken by the provinces to imply special rights in the taxation of mining companies, and has been used as a weapon by the provinces to limit any federal intervention in resources, whether to do with ownership or other issues.¹⁵

Thus the political expression of the move to community control of natural resources has usually meant, in Canadian terms, a variant of 'economic nationalism' that has been characterized as 'economic provincialism'.¹⁶ This has placed the federal government, which must represent itself as the formulator of national policies for economic development and minerals in the interest of all Canadians, in a difficult position.

The federal government, for all the problems caused by provincial ownership of natural resources, has an extensive range of powers and levers with which to formulate and implement mineral policy. To start with, it has proprietorial rights to minerals in the territories, which constitute almost 40 percent of Canada's land mass, and – a principle only established recently – to offshore minerals. Mining activity is still small in both areas, but has long-term potential for expansion.

The Constitution Act of 1982 amended the BNA Act of 1867, renaming it the Constitution Act of 1867 and adding a number of provisions (see appendix 4). The BNA Act and subsequently the Constitution Act have conferred a number of legislative prerogatives on the federal government that are not directly connected with mineral ownership, but which are vital to the process of making mineral policy. The federal government has jurisdiction over 'works and undertakings' that extend beyond a single province to constitute interprovincial trade. This jurisdiction, eventually extending over gas and oil pipelines, railways, and waterways, has had important effects on the development of Canadian mining, as has the federal power over international trade and over taxation, 'the raising of money by any mode or system of taxation'.

The federal government may also exert authority in areas not normally within its jurisdiction, on the basis of acting in what is declared to be the 'national interest', 'for the general advantage of Canada'. Federal authority was exercised over nickel production in both World Wars, backed by the threat of this declaratory power. The power was used directly with the enactment of the Atomic Energy Control Act of 1946, which placed the uranium industry under the exclusive regulation of the federal government.

15. Stevenson, 'The Process of Making Mineral Resource Policy', pp. 169-70.

16. *Ibid.*, p. 170.

Economic growth and distribution

The early policy environment of Canadian mining is sometimes characterized as '*laissez faire*'.¹⁷ It is true that governments traditionally shied away from direct participation and interference, but at the same time they have been actively involved in the development of the industry. They have inherited, and largely kept control of, the ownership of natural resources from pre-industrial times. They have also acted as facilitators, creating the infrastructure and general conditions for economic development in the mining sector.

This policy is not, strictly speaking, *laissez faire*, but it was clearly welcome to the industry nevertheless. The policy objective of all governments, federal and provincial, was to encourage investment, create new enterprise and jobs, and foster sources of government revenue. This was to be achieved by creating a climate in which economic growth would be maximized. Mining, which was starved of investment capital in the nineteenth century, and which had failed to develop as quickly as had been hoped, particularly needed such a stimulus. In Ontario, the provincial government gradually liberalized the terms of access to its lands in an effort to promote exploration. After 1845, access to lands containing base metals was systematically eased. Areas of claims were reduced, the price per acre cut, licences and fees were reduced or abolished, and the time allowed for development was extended.

Nelles has interpreted this liberalization as a victory for special interest groups over the interests of society as a whole:

Frustration with the halting, plodding progress of mining created the permissive conditions within which special pleading eroded the power of the state.¹⁸

He does not, however, discuss which policy alternatives might have been more viable or who favoured such alternatives. Certainly there was a great deal of sharp criticism at the time of government policy which, it was argued, was frightening away foreign capital and retarding the growth of the mining industry.¹⁹ Even if one accepts that much of the criticism was generated by those who stood to benefit from any changes, the dilemma of the governments – the need to develop the region and the area – was acute and undeniable. If one wishes to argue against development *per se*, one needs to justify the alternative. If not, to criticize governments for acting to liberalize the conditions of access is implicitly to set up the counterfactual hypothesis: 'If they had not made these concessions, a viable alternative

17. W.G. Jeffery, 'Mining Legislation', pp. 8-9.

18. Nelles, *The Politics of Development*, pp. 20-1.

19. Main, *The Canadian Nickel Industry*, p. 48.

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policy was open to them at the time'. Such a policy may have been available, but Nelles has not elaborated what it was.

Well over a century later, the same dilemma is still unresolved by Canadian mineral policy. The debate continues whether the Foreign Investment Review Agency (FIRA) – renamed Investment Canada by Bill C-15 in 1985 – frightened development capital away from Canadian mining, or was essential to capture the benefits of Canada's resources for society at large. In the mid-nineteenth century and the late twentieth century alike, the alternatives to encouraging foreign investment appear at times to be either less investment or more government-initiated and managed enterprise. Both of the policy alternatives have drawbacks, and it is a slow and tortuous process to come up with an acceptable blend of the two extremes.²⁰

The liberalization of access to Ontario base metals was extended in the 1860s to gold and silver. Besides the dropping of the Crown reservation on gold and silver, royalties were also cut and then removed altogether. Taxes and duties on all metallic ores were repealed by the General Mining Act of 1869. These measures were successful in that they had a marked effect on the growth of the mining industry. Some would argue, however, that they assisted the mine developers at the expense of society at large:

[After 1869 the] public claim upon the resource, so important in the companion Crown Timber Act, had been completely surrendered at the request of the industry – an action sanctioned in the interest of development... Over the next thirty years, under the beneficent freedom of the General Mining Act, the Ontario mining industry raised approximately \$33 million in gold, copper and nickel from the Canadian Shield without paying a penny in royalties.²¹

The tension between public and private sector aspirations is not one that was easily resolved by mineral policy, then or now. The difficulty of giving prospectors easy access and locations without alienating society's claim to natural resources and their rewards was dealt with at length before the onset of the twentieth century.²² The discovery of the Sudbury orebodies in 1883 and their domination by a few large companies exacerbated the problem of balancing economic incentive with social, provincial and national claims. It was followed by the Ontario Royal Commission on Mineral Resources, which recommended a larger role for the province in mining research, education and diplomacy but did not propose any basic changes in mining laws. The Commission did, however, recommend the establishment of an

20. For a recent attempt, see David L. Anderson, *Foreign Investment Control in the Canadian Mineral Sector: Lessons from the Australian Experience* (Kingston: Centre for Resource Studies, 1984).

21. Nelles, *The Politics of Development*, p. 23.

22. Archibald Blue, 'The Story of Silver Islet', Ontario Bureau of Mines Annual Report, 1896, pp. 125, 158.

Ontario bureau of mines. The government did so in 1891, and it rapidly became an important source and disseminator of mining data.

In other respects, however, the Ontario government ignored the conservatism of the Royal Commission and attempted a more interventionist policy, both in reservation of minerals to the Crown and in raising increased revenue from the mining industry. A 3-percent royalty was imposed on copper, nickel and silver, and 2 percent on iron ore, with the percentage on other minerals to be decided by order-in-council.

This tougher policy was difficult to implement because of concerted opposition from mining interests, especially land speculators, supported by the Conservative opposition and even Liberal MPPs. The opposition argued that the infant industry needed stimulation. The pressure proved successful and, over most of the last decade of the nineteenth century and first decade of the twentieth century, the provincial government actually loosened restrictions on mining companies. It facilitated both legal and physical access to resources and land sales; and it eased working conditions, discovery requirements, as well as royalty and leasehold requirements.

Even the attempt by the Ontario government to start a silver mine in Cobalt in October 1906 did not, however, reverse this long-term trend away from direct state intervention. The government picked the wrong property, and failed to create a viable mine. The failure confirmed prevailing sentiment against the principle of state mining and added force to the arguments opposing such a policy. In 1931, when an Ontario mining industry spokesman asked the provincial government to develop some gold properties, the government turned down the invitation. The experience of 1906 apparently strongly influenced the decision.²³

So sympathetic had the Ontario government become to the mining and other industries in the early 1900s that some have characterized it as a businessman's government: it is argued that businessmen, especially in mining, had used their political influence to generalize their own particular interest to become the 'public interest'.²⁴ Nevertheless, as we shall see in the next section, there were significant differences among mining executives at the time, particularly between Canadian-owned and U.S.-owned businesses.

Nationalism and Internationalism

In mineral policy, then, and possibly in economic policy in general, there is a fundamental tension between emphasizing economic growth on the one hand and focusing on distribution (the division within society of the

23. Nelles, *The Politics of Development*, p. 166, p. 430.

24. *Ibid.*, p. 428.

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benefits of economic growth) on the other. A similar tension underlies the issues of nationalism and internationalism:

- who shall have access to Canada's natural resources?
- how should rewards flowing from them be divided?
- when does the 'national interest' (or 'provincial interest') justify direct government intervention?
- how does such intervention affect the growth of the industry?

The issue of further processing of copper and nickel in Ontario in the late 1800s and early 1900s – considered in some detail below – provides both a case study of broad relevance and a portent of things to come in modern Canadian mineral policy.

The easing of conditions of access to and exploitation of mineral ores encouraged land speculation, particularly after 1869, and was partly responsible for the virtual monopoly secured in the Sudbury area by the Canadian Copper Company. This monopoly was largely unavoidable in the Sudbury area because the workable deposits were so concentrated. After 1891, the Ontario government attempted to increase its revenue from nickel, with little success. Canadian Copper consolidated its position and, in alliance with the Orford Company (both companies were based in the United States), persuaded the U.S. government to remove tariff barriers from nickel ore and matte. This opened the U.S. market to Canadian Copper, but effectively meant that refining plants would be located in the USA, as a duty of 10 cents a pound on refined nickel and nickel oxide was retained.

The Canadian federal government reacted to the new U.S. tariff policy in 1897 by protesting and threatening retaliatory export duties on ore and matte; but it could not enforce the threat. The technology of refining in the late nineteenth century still meant that the USA was an economically more efficient processor.²⁵ Moreover, the Canadian Copper Company dangled the threat of closure before the Canadian and Ontario governments, and the Orford Company threatened to import its ore from New Caledonia.

The pressure to repatriate refining reflected general feelings of nationalism and anti-U.S. feelings, which argued that Canadians should not be mere 'hewers of wood and drawers of water', but should benefit fully from their own resources. But the major thrust of the pressure was generated by the business rivals of the Canadian Copper Company, who hoped to generate support from Canadian nationalism to cut into Canadian Copper's monopoly. In the last resort, however, the federal government was too

25. Main, *The Canadian Nickel Industry*, p. 52; Nelles, *The Politics of Development*, p. 104.

fearful of creating unemployment and an outflow of foreign capital to make good its threats.

The rivals of Canadian Copper then turned to the provincial government for aid, which responded in 1899 by putting direct pressure on the company to establish refineries in the province. The Ontario government argued that, over eight years, the total value of matte was only \$4.7 million, compared to \$18 million for refined nickel and copper. Behind it stood Canadian Copper's competitors:

The strong pressure of influential business men increased nationalist sentiment to a point where it was good political strategy to put laws on the statute books in favour of refining in Canada.²⁶

The strength of the position of both the U.S. government and Canadian Copper-Orford (which merged into the International Nickel Company in April 1902) meant, however, that neither the Canadian federal nor the Ontario provincial government could impose its will on International Nickel at the time. Both governments were dependent on development capital, growth, and its resulting increases in employment and revenue. On the other hand, it could be argued that the company missed an opportunity to defuse a situation which was to trouble it for the next 20 years. It soon became clear to Canadian governments that the benefits of a simple 'growth policy' were limited, and consequently the 1890s were marked by the spreading of the struggle to impose a policy of further processing in Canada.

The struggle was orchestrated by local entrepreneurs and aspirant entrepreneurs with an interest in pressuring resource producers to locate manufacturing and processing in Canada. These groups were led by the ousted founder of Canadian Copper, Samuel Ritchie, supported by a group of Quebec and Hamilton businessmen. Though unsuccessful in the short term, the consequent publicity created a public climate in Canada distinctly unfavourable to International Nickel. Both the Canadian federal and the Ontario provincial governments had been slowly building up expertise of their own, capable of evaluating the conflicting claims of the various business interests. This enabled them to respond supportively to the potential rivals of International Nickel, who were themselves becoming increasingly vocal and involved in the public process of influencing policy. During World War I, International Nickel's position on Canadian refining – that it was uneconomic – came under increasing criticism. Both the press and the general public complained that the USA, as a neutral country, was shipping refined nickel, a strategic war material, to Germany, with whom Canada was at war.

26. Main, *The Canadian Nickel Industry*, p. 59, 56. See also Jamie Swift, *The Big Nickel: Inco at Home and Abroad*, Kitchener, Ontario, 1977, pp. 19-22.

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In February 1915 the Ontario government appointed the Royal Ontario Nickel Commission to investigate the feasibility of refining nickel in the province.²⁷ In November 1915, the Imperial Munitions Board conducted an independent study on materials for munitions, concentrating on copper and nickel refining, resulting in a note in February 1916 from the federal government to International Nickel insisting on the establishment of a nickel refinery in Canada. Partly as a result of the study and of the other pressures, a small copper refinery was erected at Trail, B.C., beginning operations in 1916. Finally, in August 1916, International Nickel announced it had selected a site at Port Colborne, Ontario, for a nickel refinery. The refinery was completed less than two years later, in July 1918.

The Royal Commission's findings came after the decision to establish the Port Colborne refinery had been made, but its mere existence, and the sorts of questions it was considering, undoubtedly influenced International Nickel's decision. The commission found that refining in Canada would be economic, and that foreign ore producers did not (contrary to International Nickel's argument) constitute a serious potential source of competition to Canadian producers. It refused to recommend that refining in Canada be made compulsory by law, partly because International Nickel had already started a refinery, and partly because it doubted that the Ontario government possessed sufficient regulatory powers to enforce refining in the province.

From 1912 to 1917, because of the difficulty of distinguishing between profits from mining, smelting, and refining, an agreement was arranged according to which the company paid a fixed annual Canadian tax of \$40,000, even though profits increased from \$3.5 million in 1912 to \$11 million in 1916. In 1917, partly for this reason, a new Mining Tax Act was passed by the provincial government which discriminated against particular metals, as well as large producers and producers from particular areas. In effect this attacked the nickel producers, particularly International Nickel. The new tax increased the rate on nickel and copper only from 3 percent to 5 percent, up to a profit level of \$5 million. As profits rose above \$5 million, the rate increased further. The Act also permitted deductibility of taxes paid in Canada and Great Britain, but not the USA. The tax was made retroactive to January 1916 and International Nickel, after an unsuccessful appeal to the Canadian federal government, was forced to pay \$1.3 million in back taxes.²⁸ Under wartime conditions the company had no alternative supply of ore, and no alternative but to pay.

The effect of the tax was to reinforce International Nickel's decision to start building refining capacity in Canada. Such a move was now needed not

27. The Royal Ontario Nickel Commission, appointed September 1915, reported in March 1917. It was composed of a metallurgist, a lawyer, a geologist and Ontario's Deputy Minister of Mines, T.W. Gibson.

28. Main, *The Canadian Nickel Industry*, p. 84-88

only to silence Canadian nationalist opposition, but also to avoid double taxation. The latter was particularly important, as International Nickel had long-term contracts with its customers and therefore could not pass on the costs to the consumer. It became increasingly clear that taxation was a potentially powerful and under-utilized instrument of government policy. Unusual and temporary conditions of nationalism and concern over the strategic implications of foreign control during the war had combined to shift the balance against International Nickel. The resulting increased expertise and capacity of governments to generate policy, and the heightened awareness of the instruments available to them, became permanent influences on the formulation of mineral policy.

The company responded by a vastly increased expenditure of time and money on public relations, with some success, notably the reversal in 1924 of the discriminatory 1917 tax. In the 1930s strategic concerns about the supply of nickel to potential enemies were renewed, but the widespread unemployment which accompanied the Depression was a politically more explosive and economically overriding issue. During World War II, however, the industry was placed firmly under federal government control, with the rationale being the national interest in times of emergency.

Thus, another principle of mineral policy had been entrenched: that of political intervention when the government and/or 'public opinion' thought it in the provincial and national interest (such intervention would, of course, be far more difficult to push through if there was a fundamental disagreement between federal and provincial governments). From the principle of direct government intervention in times of emergency, such as war, it was but a short step to intervention at times that the 'national interest' was thought to justify it. Different federal governments, naturally, utilized the principle in different ways. Diefenbaker, for example, minimized intervention while Trudeau accelerated it.

This power, to intercede in the 'national interest', was allocated to the federal government at the time of Confederation, but was sparingly used up till World War II. The experience of the nickel industry in Canada, however, demonstrated that the principle could become a real threat in practice. Facing this sword of Damocles, the industry has frequently been more amenable to meeting the government's mineral policy objectives by compromise rather than confrontation.

In the Third World the concept of intervention in the public interest, and its exercise, have become even more important. Mexico, for example, established a Ministry of the National Patrimony to reinforce the principle that the extraction of all nonrenewable resources should directly benefit the nation as a whole.²⁹ Governments, according to this view, should be

29. Wayne Jeffery, 'Mineral Policy Alternatives: A Background Essay', Energy, Mines and Resources Internal Report MR1 81/4, Ottawa, 1981, p. 3-4.

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managers of resources, rather than mere custodians. Most Canadian federal governments have rejected this view as a general principle, making a possible exception of oil and gas. Since World War II, however, they have on occasion taken on the role of protector of the national patrimony, the national interest, and national security. Similarly, provincial governments have occasionally intervened on behalf of the 'provincial interest'.

Whatever the stance on the manager-custodian issue has been at any particular point in time, after World War II the mining industry has always been aware of the threat that governments might invoke the 'national patrimony' principle. The climate of mineral policy formation, therefore, was permanently changed by war, burgeoning nationalism, and the growth of the role of the state; the 'nickel issue' neatly encapsulates these developments in Canada.

3. The Mineral Policy of Growth, 1945-70

In general, [the Canadian] ad hoc approach to policy resulted in laws, regulations, practices, programs, and agreements supportive of the mineral industry and its development. Growth was the dominant policy objective.¹

The period after World War II was characterized both by the growth of governments and by the fairly uniform adoption of growth-oriented mineral policies. These policies were relatively unchallenged at the time, and there was thus no need to justify them in terms of Grand Theory or five-year blueprints. By the late 1960s, however, the primacy of growth in mineral policy began to be challenged, and conscious attempts to formulate a national mineral policy began to be initiated.

Although the encouragement of growth was the overriding principle of post-World War II mineral policy, it was interwoven with many related goals. Growth was to be achieved by providing various inducements to both domestic and foreign companies to invest in Canadian mining. The success of these inducements both enabled and required governments to concern themselves increasingly with policy towards foreign investors. As has been shown above in analyzing the issue of further processing, this area was not a new one for mineral policy. But a number of related issues emerged from it which need to be understood if the events of the later period are to be fully comprehensible. Several proposals were made to meet the challenges of foreign investment in the 1950s and beyond, proposals which have since become durable themes of Canadian mineral policy. Among the key suggestions were:²

- increased Canadian participation in foreign mining companies in Canada;

1. Donald J. Patton, 'The Evolution of Canadian Federal Mineral Policies', in Carl E. Beigie and Alfred O. Hero Jr., *Natural Resources in U.S.-Canadian Relations*, vol. 1, p. 205.

2. Drawn from the address of C. D. Howe, Liberal Minister of Trade and Commerce, to the Canadian Club of Chicago in 1956; the Royal Commission on Canada's Economic Prospects of 1958; and 'Some Guiding Principles of Good Corporate Behaviour' issued in 1966 by Robert Winters, Minister of Trade and Commerce. For the full collation and exposition see Patrick James Caragata, 'Non-fuel Minerals and Canadian Foreign Policy: Negotiating from Strength and Weakness', University of Toronto doctoral thesis, 1980, p. 111 and following.

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- more training for Canadians by these companies and more executive positions for Canadians;
- more information to be supplied by foreign companies to the federal government;
- greater freedom for the Canadian-based subsidiary company to export to markets not of its parent's choosing;
- more research and development to be conducted within Canada, with local management being given more autonomy in directing it;
- a greater degree of further processing of minerals by both Canadian and foreign companies prior to exportation.

Federal and provincial governments, however, generally avoided the kind of intervention in the mining industry that would have been required to achieve the goals. In the two decades following World War II, they largely concentrated on providing the incentives necessary to encourage growth. This facilitative policy can be traced back to the nineteenth century, but circumstances now conspired to greatly accelerate its success. Before and during the war, the demand for minerals grew rapidly. The expected post-war depression did not materialize and a period of fairly stable growth for most western economies prevailed through the 1950s, slowing from 1957 to 1959, and picking up again in the 1960s, when there was generally strong growth (table 1). The period is marked by a strong growth in physical production, not merely a growth in production values through rising prices (table 2).

Table 1

CANADA, VALUE OF MINERAL PRODUCTION 1945-70 (*\$ million, current*)

Year	Metals	Industrial Minerals	Mineral Fuels	Metals as % of Total
1945	317	88	94	63.5
1950	617	227	201	58.9
1955	1,008	373	414	56.2
1960	1,407	520	566	56.4
1965	1,908	761	1,046	51.4
1970	3,073	931	1,718	53.7

Sources: Energy, Mines and Resources Canada, Statistics Canada.

Table 2

*PRODUCTION OF 10 CANADIAN MINERAL COMMODITIES, 1950-70
(thousands of units)*

	1950	1960	1970
Cement - t metric	15,188	5,250	7,208
Coal - t	17,363	9,989	15,063
Copper - kg	239,685	398,490	610,275
Gold - g	138,151	143,999	74,939
Iron ore - t	3,270	19,551	47,458
Nickel - kg	112,181	194,596	277,489
Potash - t	n.a.	n.a.	3,103
Sand Gravel - t	66,310	174,246	183,845
Uranium - kg	n.a.	11,564	3,724
Zinc - kg	284,154	369,107	1,135,708

Source: Statistics Canada

n.a. = not available

The United States in particular increased its mineral requirements to such an extent that it began to be concerned about shortfalls and the necessity of stimulating new sources of supply, particularly in Canada. As a net importer of minerals, the USA was concerned enough about the problem to appoint a President's Materials Policy Commission. This commission reported in June 1952 (the 'Paley Report') and identified the prospects of continued deficiencies in supply.

The growth policy prevailing in Canada after World War II provides the context for important developments in several distinct fields. These developments were the harbingers of the issues which were to rock both governments and the mining industry in the 1970s. Four of the most important of these were:

- i growth and bureaucratization of government;
- ii taxation changes;
- iii foreign investment and its multiplier effect;
- iv direct government intervention.

Expansion of Governments

THE FEDERAL GOVERNMENT

The struggle of governments to develop sufficient raw data and policy expertise to implement mineral policy effectively stretches back to the nineteenth century and has been highlighted above in the case of the 'nickel question'. During and after World War II both business and governments

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accelerated the bureaucratization of their structures and professionalized their operations. Successive federal governments established Crown corporations as instruments of government enterprise: for example, in resources, Eldorado Nuclear (1944) and Petro-Canada (1975). After 1960 the incorporation of public enterprises accelerated and by 1983 there were 400 wholly-owned or controlled federal Crown corporations.³

At the federal government level, the harbinger of what is now the Department of Energy, Mines and Resources was the Geological Survey of Canada, established in 1841 by the first Parliament of the Province of Canada (created by the 1840 Act of Union).⁴ The Geological Survey was greatly expanded after Confederation in 1867. In 1907, in response to the requests of the Canadian Institute of Mining and Metallurgy, the federal government formally established the Department of Mines through the Geology and Mines Act. With a staff of 22, the new Department incorporated the Geological Survey and a new Mines Branch and provided services to the private sector, to Canadian prospectors, explorers, metallurgists and those selling minerals.

During World War I the Department of Mines grew rapidly, catering to the growing demand for war materials in Europe. Research by the Department, especially in metallurgy, was enormously expanded. In 1936, the Department of Mines and Resources was created by the Department of Mines and Resources Act. This reorganization incorporated the departments of Interior, Mines, Indian Affairs, and Immigration and Colonization into one large omnibus department, which exercised jurisdiction over the proprietary land rights of the federal government. These federal rights had, with a few exceptions (such as national parks and western CPR holdings), been confined since 1930 to areas north of the sixtieth parallel. World War II occasioned further expansion by the department, with rapid demand-induced growth by the mining industry. After World War II, the formation of the Department of Northern Affairs and Natural Resources stripped away the Department of Mines' jurisdiction over federal lands north of the sixtieth parallel, leaving it in a position described by one commentator as 'of minimal importance'.⁵ In 1950 the Department was renamed the Department of Mines and Technical Surveys by the Depart-

3. Roy Romanow, 'The justification and evolution of Crown resource corporations in Saskatchewan', in Richard Bartlett (editor), *Mining Law in Canada* (Saskatoon, Canada, 1984), p. 47. See also Nelles, *The Politics of Development*, p. 494.

4. Roy M. Longo (editor), *Historical Highlights of Canadian Mining*, Toronto, 1973, pp. 108 and following; A. Ignatieff, *A Canadian Research Heritage: An historical account of 75 years of federal government research and development in minerals, metals and fuels at the Mines Branch* (Ottawa: Minister of Supply and Services Canada, 1981), p. 5; Stevenson, 'The Process of Making Mineral Policy', dates the formation to 1842.

5. Stevenson, 'The Process of Making Mineral Policy', p. 182.

ment of Mines and Technical Services Act of 1949, when it incorporated the Dominion Lands Branch and the Geodetic Survey.

Finally, in 1966, the department underwent a major reorganization, becoming the Department of Energy, Mines and Resources (EMR) with the passing of the Government Organization Act. EMR was made responsible for the discovery, investigation, development and conservation of all Canada's mineral and energy resources, including the offshore resources. In addition to the traditional emphasis on scientific research and data collation, it was now made responsible for economic research into markets and potential demand for mineral resources and energy. This policy responsibility was an important one, and EMR was specifically authorized to carry out interdisciplinary studies in order to develop policies and plans for resource management and conservation.⁶ These were, of course, expected to take into consideration policies developed by other departments.

The policy orientation in EMR was not, of course, entirely new. The Mineral Resources Division had been established as a division of the Geological Survey of Canada in 1886, with the function of collecting, compiling and publishing mineral statistics essential to policy and economic analysis. It also undertook geological examinations of areas around producing mines or known deposits with economic potential. Although the statistical functions were transferred to the Dominion Bureau of Statistics (DBS) in 1922, input from mineral commodity specialists with an economic orientation ensured the continuing influence of the division, and its continuing special access into the DBS system.

The Mineral Resources Division was transferred from the Geological Survey to the newly-created Mines Branch in 1907. In 1936 it was renamed the Economics Division, and 10 years later was once again renamed the Mineral Resources Division. In 1956 it became a headquarters unit and became the Mineral Resources Branch in 1966.⁷ The Mineral Resources Division has thus been involved for many years in the analysis of resources and the development of mineral policies. In the old Department of Mines and Technical Surveys it was responsible for the areas of economics, legislation and taxation, but EMR's policy orientation became far stronger than that of Mines and Technical Surveys had been.

Overall, however, as we shall see below, EMR has never been in a position to formulate mineral policy unilaterally. Even within the federal government, there are a number of other departments and bodies which have a crucial voice in the formulation of mineral policy:

6. Longo, *Historical Highlights of Canadian Mining*, p. 113; Ignatieff, *A Canadian Research Heritage*, p. 12.

7. Ignatieff, *A Canadian Research Heritage*, pp. 11, 130, 132, 143; Keith Buck, private communication, December 1984.

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- departments such as Finance, Regional Industrial Expansion, External Affairs, Indian Affairs and Northern Development, and Environment;
- federal regulatory agencies such as the Atomic Energy Control Board, National Energy Board, and Foreign Investment Review Agency;
- Crown corporations, such as Eldorado Nuclear, Cape Breton Development Corporation, and Petro-Canada;
- central agencies and committees, such as the Prime Minister's Office, the Privy Council Office, and various Cabinet committees (on Planning and Priorities, on Economic and Regional Development, on Social Development and on Foreign and Defence Policy). The Cabinet committees were streamlined during John Turner's brief tenure and are being further transformed by the Mulroney government.

Outside the federal government of course, there are the provinces – major actors – and a large number of competing interest groups (such as local communities, environmentalists and native groups) to be taken into account. Nevertheless, there is no doubt that EMR's capacity to make policy, whatever its real limitations, was made considerably more significant than that of its predecessors, which had been widely regarded as technically-orientated service departments, sometimes too apt to perform as the mouthpiece of the mining industry within the federal government rather than as an independent source of policy advice:

in essence, the Department of Mines and Technical Surveys is a service department of the Government of Canada. It exists to serve and to advance the best interests of the mineral and metal industries which today occupy a position of greatest consequence to the Canadian economy.⁸

THE PROVINCIAL GOVERNMENTS

The provinces (as discussed in chapter 2) have been able to play a fairly major role in the formulation of Canadian mineral policy by virtue of the powers vested in them by the BNA Act, particularly Section 109. They have retained the same powers under the Constitution Act of 1982, with some additions (see appendix 4). Some provinces began to make an important contribution well before the turn of the century. This was particularly true of Ontario, where politicians and businessmen were keen to establish continental markets for local products and to maximize the degree of manufacturing taking place in Canada before the staple commodities were exported. In this respect Ontario mineral policy provided the example for federal policy:

8. *Western Miner*, February 1960, vol. 33, no. 2; Caragata, 'Non Fuel Minerals and Canadian Foreign Policy', p. 118; see also Stevenson, 'The Process of Making Mineral Resource Policy', p. 183.

Interestingly enough, the province and its various interest groups pursued this development strategy fitfully throughout the first three decades of this century without the understanding or support of the federal government.⁹

Despite its role as a policy-making trendsetter, the Ontario government still saw its Department of Mines, elevated to a full portfolio in 1919, as having a limited role. In 1926, Charles McCrae, the Conservative Minister of Mines, described his department's duties as simply administrative and educational. In 1931, when a spokesman of the industry itself took the initiative in suggesting the government develop some promising gold mining properties, he responded: 'Only in Russia does the Government mine gold...'¹⁰ If anything, McCrae's Department of Mines declined in importance as an initiator of mineral policy, maintaining only a small bureaucracy with limited (administrative and educational) functions.

Nor was this limited policy-making role among the provinces before the 1960s confined to Ontario. The government departments of other provinces dealing with resources, particularly in the pre-1970 period, showed a striking degree of similarity. They tended to be broken down into branches and divisions, such as water, forests, mines and petroleum, which were better adapted to cooperation with the private sector than to taking independent policy initiatives or providing an overall provincial policy on natural resources.¹¹ The issues they dealt with were generally technical rather than 'political'; they did not tend to generate contentious questions and policy debate.

In general, officials and bureaucrats with a high degree of technical knowledge of the industry were recruited. Many had direct working experience in the private sector and shared its assumptions and values. Most continued to work closely with former colleagues and to circulate freely between jobs in the public and private sectors. Liaison with other departments in the provincial bureaucracies, however, was conversely restricted, and many of the resource departments were isolated from other branches of the bureaucracy.¹² Later, when the provinces began to make significant policy decisions affecting the mining industry, this became very important. In at least a few important cases in the 1970s, as we shall see, the provincial mining departments were bypassed or ignored by other provincial departments, as was EMR at the federal level.

FEDERAL - PROVINCIAL

Mineral policy and mining development, as we have seen, do not move exactly in tandem. The foundations of Canada's mineral policy, for exam-

9. Nelles, *The Politics of Development*, p. ix.

10. *Ibid.*, p. 430.

11. Stevenson, 'The Process of Making Mineral Policy', pp. 173-4.

12. *Ibid.*

ple, were laid down long before a significant mining industry had developed in Canada. Conversely, the policy clash between federal and provincial governments in the 1970s was preceded by significant structural changes in the mining industry in the 1950s and 1960s which were harbingers of the new federal-provincial policy relationship.

The powers vested in the provinces in 1867 by section 109 of the BNA Act, giving them jurisdiction over natural resources, were not considered significant at the time. The federal government was given control of what were then the substantial sources of revenues, in the non-resource area. In 1930, it voluntarily (albeit under some pressure) ceded the bulk of its remaining mineral rights in the provinces to Alberta, Manitoba and Saskatchewan, retaining significant rights only in the territories. The growth of the resource industries in the regions, however, even before World War II,¹³ began to initiate structural changes in the economy and a power shift to the provinces.

These changes were masked by developments during World War II, when the Canadian federal government exercised extraordinary powers over the economy, including the resources vested in the military. At the time, the federal government accounted for over 80 percent of all government expenditure, but this position could not be maintained in peacetime, and after the war the provinces steadily recovered ground which had been temporarily lost to Ottawa.

A major reason for the growing economic strength of the provinces was the expansion of the resource industries with, as we have seen, the USA taking much of the increased production and investing much of the required capital. When U.S. capital inflows threatened to dry up at the end of the 1950s, the provinces began to compete for it by offering subsidies, concessions, infrastructure and various other inducements.

'Tax room' vacated in the 1960s by the federal government meant the provinces had more to offer.¹⁴ Expenditures by the provinces have been calculated as 10 times greater in 1971 than in 1950.¹⁵ With this growth, naturally enough, came an expanded appetite for revenue. Given provincial jurisdiction in natural resources, this led to a greater provincial desire and capacity to play a major role in the formulation of mineral and other resource policy.

At first there was little actual conflict between the federal and provincial policies of growth, but in the 1960s the situation began to change. René

13. Harold Innis, *Essays in Canadian Economic History*, (Toronto, 1956), p. 209, pp. 317-18.

14. Garth Stevenson, 'Federalism and the Political Economy of the Canadian State', in Leo Panitch (editor), *The Canadian State: Political Economy and Political Power* (Toronto, 1977), pp. 80-2.

15. *Ibid.*, p. 84.

Lévesque, then Quebec's Mines Minister, introduced policies to increase provincial control over resource development, reorganizing government departments, tightening up regulation of the alienation of mineral rights, increasing acreage taxes, stiffening work requirements and raising mining taxes. These moves, however, had a limited impact on relations with the federal government, and Lévesque's early fame was due to the nationalization of hydro-electricity rather than mineral policy.¹⁶

In the 1960s some of the provinces, far from being hostile to the federal role *vis-à-vis* mineral policy, actually came to the federal government for advice as to how they should develop their own policies. The federal government responded with a series of reports¹⁷ suggesting how the provinces might reorganize their resource departments, what policy opportunities for mining development were available, and how the provinces might develop their own policy-making capacity. Ironically, some of this advice later helped the provinces in their disputes with the federal government in the 1970s; but the fact that the provinces then saw the need to ask for advice probably means that provincial policy changes, responding to the rapid growth of Canadian mining, would have come with or without federal help.

These reports will be considered in more detail below, as they present a striking illustration of the development of federal thinking on mineral policy, the suggested policy move away from maximum growth, and the need for a more assertive 'pro-active' governmental presence in the mining industry. Their relevance here is that they called strongly for a further growth of the mining bureaucracy in the provinces; higher salaries to attract competent professionals from outside the province concerned if necessary; and reorganization of both the internal structures of the mines departments and their relationship with other provincial departments.¹⁸ In the later reports, on Manitoba and British Columbia, EMR seemed to be suggesting a duplication of recent internal changes in EMR itself: the development of the internal capacity to identify development opportunities, evaluate them for

16. David Yudelman, 'Materials Policy: Canada', in Michael B. Bever (editor-in-chief), *Encyclopaedia of Materials Science and Engineering*, (Oxford: Pergamon Press, 1985, in press); Stevenson, 'The Process of Making Mineral Resource Policy', p. 175.

17. For example: Mineral Resources Division, Department of Mines and Technical Surveys, *Mineral Resource Development: Province of Newfoundland and Labrador*, Mineral Resources Internal Report MR1288/66, Ottawa, May 1966; Mineral Resources Division, Department of Energy, Mines and Resources, *Mineral Resource Development: Province of New Brunswick*, MR1340/67, Ottawa, September 1967; Mineral Resources Division, Department of Energy, Mines and Resources, *Mineral Resource Development: Province of Nova Scotia*, MR1 368/68, Ottawa, June 1968; Mineral Resources Branch, Department of Energy, Mines and Resources, *Mineral Industry Development in Manitoba to 1980*, MR1381/68, Ottawa, October 1968; Mineral Resources Branch, Department of Energy, Mines and Resources, *Mineral Resources Management in British Columbia*, MR 415/69, September 1969.

18. *Newfoundland and Labrador*, p. 20, 21; *British Columbia*, p. 11, p. 15, p. 21.

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feasibility and social desirability, and implement them through policy programs. When some of the provinces later succeeded in doing the latter, of course, it meant they were moving into space previously occupied not only by the private sector of the industry, but by EMR itself. The challenge to EMR from the provinces in the 1970s, then, was aided in its inception by a paternal federal government.

Prior to 1970, the seeds of tension between the federal and provincial governments were contained in the divided constitutional jurisdiction over resources and the revenues they generated, and in the escalating growth of both the federal and provincial governments with a corresponding growth in appetites for revenue. The relationship at that time, however, was not characterized by the open tension that was to develop in the next decade during the free-for-all struggle for revenue initiated by the commodities boom of the early 1970s.

Taxation Policy

Our goose is laying the golden eggs just now for Ontario and Canada and we have been wise in not increasing taxation. The more the mines make the more people are employed and the sounder is our commercial structure.

Charles McCrae, Ontario Minister of Mines, 1933.¹⁹

The need to encourage development of mines and the difficulty of doing so, both in Canada and internationally, tended to dissuade governments from taxing mining industries heavily in the early part of the 20th century. Even when political controversy reigned and where the mining company was unpopular and 'foreign' (as was the case with International Nickel), the rates of taxation were moderate: for more than two decades after 1907, for example, Ontario mines were taxed 3 percent on profits between \$10,000 and \$1 million, and 5 percent on profits over \$1 million.

There are, however, three levels of taxation on mining which need to be taken into account. Provincial taxes levied on mining predate income tax and were initiated before Confederation.²⁰ They are essentially fees paid by the private sector in exchange for being allowed to exploit resources belonging to the public domain, and take various forms, including taxes on mining profit, mineral acreage, and assessed value of deposits, and royalties on revenue from minerals. Most are exclusive of processing profits and are

19. Letter to Ontario Premier Henry. South African gold taxes at the time, according to confidential Ontario studies, were over 400 percent higher: cited in Nelles, *The Politics of Development*, p. 435.

20. M.W. Bucovetsky, 'The Mining Industry and the Great Tax Reform Debate', in A. Paul Pross, editor, *Pressure Group Behaviour in Canadian Politics*, Toronto, 1975, p. 90.

deductible from income for the purposes of calculating corporation tax. These mining taxes are levied by the provinces only, and are distinct from corporate income tax, which is levied by both the provinces and the federal government. The provincial mining tax has generally been treated as a royalty deductible from income otherwise liable to corporation tax.

The gold bonanza which followed the effective doubling of the U.S. dollar price of gold in 1932 resulted in a complex rate-of-return system emerging in South Africa to tax 'windfall' profits on the gold mines. The Ontario government, though aware of these changes, chose not to follow suit, but to keep taxes low and to challenge as excessive the federal government's share of mining profits.²¹

The federal tax system had long encouraged mining development through the depletion allowance, which reduced the base on which taxable income was calculated, and was introduced at the same time as the income tax itself. Depletion allowances were built partly on U.S. precedents, but were more generous and provided a greater inducement to exploration and development. There were also exploration and development allowances which treated all exploration and development costs as current, to be immediately written off by income, and preproduction expense allowances. The three-year tax exemption, introduced in 1936, which exempted from income tax the profit from new mines for their first three years of production, was unique to Canada, had no counterpart in the U.S., and meant that the Canadian taxation of mines – which was otherwise similar in most respects to the U.S. system – gave Canadian producers a competitive edge. A further provision allowing for the write-off of preproduction expenses enabled the three-year tax-exempt period to be effectively extended, in some cases by a number of years.²²

The rationale for the special treatment accorded to mining over other sectors was, at first, to stimulate gold mining during the Depression, when the demand for commodities other than gold weakened dramatically. Later, during World War II, it was felt necessary to ensure the continued supply of strategic metals and minerals. Thus, when the new Excess Profits Tax was introduced in 1940, income derived from base metal and strategic mineral mines was exempted from it.²³ The exploration and development allowances were also initiated during the war and extended in another form after 1945.

In 1949, a 30-percent capital cost allowance was introduced for the depreciable assets of mining companies. Depending on the asset, it could

21. Nelles, *The Politics of Development*, p. 438, p. 440.

22. John Davis, *Mining and Mineral Processing in Canada*, p. 357; Bucovetsky, 'The Mining Industry and the Great Tax Reform Debate', p. 91, 93; Keith Buck, private communication, December 1984.

23. Donald J. Patton, 'The Evolution of Canadian Federal Mineral Policies', p. 210-11.

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rise to 100 percent.²⁴ In 1950, mining was spared the increased war taxes imposed on nonstrategic industries following the outbreak of the Korean War. Industry spokesmen were understandably pleased, and organizations such as the Canadian Metal Mining Association were typical in responding to federal tax legislation in glowing terms when making its representation to the Royal Commission on Canada's Economic Prospects (the Gordon Commission) in 1956. Federal legislation, it said, was

...incentive legislation of the highest value... It has proved an important factor in stimulating mining expansion and in securing development capital.²⁵

Although this special treatment continued to be accorded the mining industry through the 1950s and 1960s, important opposition to it can be seen as early as the *Final Report* of the Gordon Commission on Canada's Economic Prospects, published in 1957, which pointed out that the industry was in the process of growing and maturing and would not be in a position indefinitely to justify a tax treatment which favoured mining over other industries. The Royal Commission on Taxation (the Carter Commission) began in 1962 a lengthy re-examination of federal tax policy towards, among others, the mining industry, which was to challenge the very foundations of the mineral policy of growth that had prevailed since World War II.

Government Intervention

There are many reasons and rationales for government intervention in the mining industry, but the two major ones have been socio-economic and nationalistic. Governments, both federal and provincial, by and large avoided direct intervention in the mining industry until the mid-1960s, and then their major thrust was in the energy sector.²⁶

SOCIO-ECONOMIC AND REGIONAL INTERVENTION

One of the early examples of federal intervention for socio-economic and regional reasons was the bailout of part of the gold mining industry after World War II. In 1948 the Emergency Gold Mining Assistance Act was introduced to assist high cost or marginal Canadian gold mines affected by rising production costs without any compensating increase in the price of gold, which was artificially fixed in U.S. dollars. A subsidy was provided on the cost of production, with the objective of keeping mines in production

24. Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', p. 123.

25. Cited in Patton, 'The Evolution of Canadian Federal Mineral Policies', p. 211.

26. Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', p. 115.

and protecting the communities which depended on them. These subsidies continued until the 1970s, when the freeing of the gold price to open market levels made it superfluous. The Act finally expired in 1976. When introduced, largely as a social measure, it was meant to be temporary, but it took on a life of its own and created a generation of miners who would otherwise have had to adjust to other occupations. Although postponing the decline of a small number of communities, the subsidy program resulted, some would argue, in the eventual depletion of the ore reserves of much of the Canadian gold mining industry during a period of an artificially controlled low price.²⁷

Canadian mining grew very rapidly in the two decades after World War II. By 1967 it was a leading resource industry, and a stimulator of secondary and tertiary industry through its multiplier effects, which created markets for industries other than mining. As its contribution to GNP grew, so did its general and its regional economic significance.²⁸ In the 20 years to 1970, mineral production grew from 5.8 percent of GNP to 7.1 percent, or nearly \$5 billion annually. Minerals and mineral products accounted for one third of Canada's exports by 1970, 43 percent of revenue freight traffic, and more than 12 percent of total annual capital investment. They were also the backbone of Canadian infrastructure development:

virtually all new railroad development since the end of World War II has been directly related to mineral activity. Much of the new port development and a substantial number of power developments have been brought into being to serve mineral projects. One of the world's largest systems of pipelines has been constructed to serve the oil and gas sectors of the mineral industry. Minerals have, and will continue to have, a major role in the opening up of the frontier areas of Canada, both in the provinces and in the northern territories.²⁹

In 1961, the Diefenbaker government introduced a special program, Roads to Resources, to open up remote areas potentially rich in natural resources. Nearly 5000 kilometres of roads were built, backed by federal expenditures (equally divided among the provinces) of \$75 million.³⁰

Thus mineral policy was, and is, inextricably tied up with Canadian economic development policy overall, with infrastructure policy, and with

27. Mineral Development Sector, Energy, Mines and Resources, M21-1976, 'Final report on the Administration of the Emergency Gold Mining Assistance Act', Ottawa, 1976; Yudelman, 'Materials Policy: Canada'; Keith Buck, private communication, December 1984.

28. J-P Drolet and R.B. Toombs, 'The Influence of the Mineral Industry on the National Economy'.

29. W. Keith Buck, *Factors influencing the Mineral Economy of Canada: Past, Present and Future*, Mineral Resources Branch, EMR, MR106, Ottawa, 1970, p. 2.

30. Patton, 'The Evolution of Canadian Federal Mineral Policies', pp. 217, 241; EMR, *Annual Reports*.

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regional policy. Infrastructural expenditures by Canadian governments were supported by mining traffic, but they also provided invaluable assistance to the mining industry:

The principal form of financial assistance to the industry has been the provision of infrastructural support for mining ventures in the remote regions.³¹

NATIONALIST AND STRATEGIC INTERVENTION

During World War II the federal government participated directly in production of minerals, using several types of agencies:

- Crown corporations: with complete federal government ownership and control; e.g. Wartime Metals Corporation, which mined and processed tungsten, magnesium and molybdenum;
- Crown plants: owned by the federal government, but operated by private companies such as Algoma Steel and Dominion Steel and Coal;
- Crown assets located in facilities of and used by privately-owned companies.

Over \$40 million in mining assets were controlled by the federal government in 1945-46, but had largely been disposed of by 1947.³² Eldorado Mining and Refining Company, 'a Crown corporation appropriated from private industry in 1944 at the cost of over \$5 million' to produce uranium, stayed in federal hands for reasons of 'national security'.³³ It became the first peacetime company owned by a Canadian government to engage in mineral exploration and development.³⁴

As we have seen in examining the foundations of Canadian mineral policy, the industry was dependent as early as the late nineteenth century on foreign investment and expertise, especially from the USA. It has also always relied (and will continue to rely) heavily on foreign markets for its exports, particularly U.S. markets. Thus the issues of foreign ownership and of further processing which were sharply focused by the debate on 'the nickel question' in the first decades of the 20th century continued to draw the attention of policy makers and analysts after World War II.

In 1956, the federal Leader of the Opposition, George A. Drew, renewed the age-old attack on the policy which allowed the export of unprocessed raw materials, in arguing for 'a national development policy

31. Patton, 'The Evolution of Canadian Federal Mineral Policies', p. 217.

32. Margot J. Wojciechowski, *Federal Mineral Policies 1945 to 1975: A survey of Federal Activities that affected the Canadian mineral industry* (Kingston: Centre for Resource Studies, 1979), p. 7.

33. *Ibid.* See also p. 31.

34. Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', p. 115.

which will develop our natural resources for the maximum benefit of all parts of Canada and encourage more processing in Canada.' Was the Canadian mining industry, he asked, being forced into an undesirable and limited role?

Are we going to be hewers and diggers in large measure for a great and friendly neighbour who will then sell the finished products back to us after the most profitable employment has been created for their own people, or are we going to make the processed and finished articles that we need here in Canada...to use the materials and resources that providence has entrusted to our care?³⁵

The following year, 1957, the Gordon Commission's study on Canadian mining expressed similar misgivings about the low levels of Canadian processing of mineral exports.³⁶ Nevertheless, the proportion of Canadian copper, lead and zinc exports in processed form showed a steady decline after 1960, largely because of increased exports to Japan in unprocessed form. Thus both of the perennial mineral policy issues, foreign ownership and further processing of Canada's minerals, remained live issues in the 1970s.

In the late 1960s, traditional mineral policy still appeared to many observers to be stable and unchallenged. Its basic requirements were seen in 1967 by two senior EMR analysts to be:

- stability of the legislative environment;
- provision of information;
- taxation incentives allowing for the high risks of mining;
- ensuring an adequate supply from domestic sources to the domestic market;
- promotion of industry growth to reinforce national development policies.

Most of these five requirements were seen by EMR to be adequately served by the mineral policy in place at that time.³⁷

By this time, however, the portent of increased conflict over mineral policy was beginning to become discernible. The question being asked of mineral policy had sharpened considerably and was increasingly coming down to the deceptively simple issue: are Canadians getting 'optimal' benefit from their resources? This formulation immediately inspired further

35. House of Commons, *Debates* 9 July 1956, p. 5780, p. 5779. Cited in Patton, 'The Evolution of Canadian Federal Mineral Policies', p. 208.

36. John Davis, *Mining and Mineral Processing in Canada*, p. 326.

37. J-P Drolet and Ralph Toombs, 'The Influence of the Mineral Industry on the National Economy', p. 32.

questions: Which 'Canadians' does this refer to, and what are 'optimal' benefits? These further questions were eventually posed (though not answered) in the 1970s and early 1980s. Mineral policy, previously an area of such quiet consensus that many felt a policy did not exist or need to exist, now became a battleground of federal and provincial governments, as well as the private and public sectors.

4. The Mineral Policy of Redistribution, 1970-78: Government Relations

In the late 1960s and through the 1970s, the old consensus mineral policy of growth, though never entirely destroyed, was eroded and supplanted. In its place emerged an emphasis on the optimization of benefits from a mining industry which was now regarded as mature. Canada and Canadians now needed, according to the new policy, to derive maximum benefit from their mining industry. It now made most sense to emphasize 'quality' of development rather than mere 'quantity'.

'Quality' of development, unfortunately, came to be identified in the minds of some as applying merely to 'socially-acceptable' development. 'Quantity' on the other hand (the policy of growth) was seen by some as applying only to economically-viable mining development. Behind this was the emergence of a post-World War II ideology favouring government intervention because it was increasingly felt that the interests of the private sector were very different to those of society in general. The 'invisible hand' of the market (which is making such a strenuous comeback in the 1980s) was increasingly challenged after the war by those who felt it did not fulfill the 'public interest' in 'social' policy areas such as further processing, environmental protection and regional development.

There is no necessary connection, in fact, between quality development and purely social goals. 'Quality development', for example, can refer simply to high-grade, low-cost, high-return operations which need not be large creators of jobs. Nor need a mineral policy of growth only consider economic goals. 'Non-quality' growth projects might well create far more employment opportunities, for example, than 'quality' developments.

Perhaps the major reason for the confusion was that the real shift in mineral policy taking place was not from 'quantity' to 'quality' development, but from a prime emphasis on growth to an increasing emphasis on redistribution. Redistribution applies not only to changes in revenue, in the balance of taxes, profits, dividends and wages, as distributed between federal and provincial governments, owners of the producing companies and labour. It also applies to a redistribution whereby, for example, the burden of pollution, health, and safety costs might be shifted between protagonists.

This new emphasis on redistribution accounts for many of the controversial changes in mineral policy in the 1970s; in particular, the ruptures between federal and provincial governments, and between industry and governments. This chapter deals with reasons for the change of emphasis, and some of its implications.

The Expanding Role of Government

The world-wide growth of the role of governments in modern economies since the Depression, and particularly since World War II, is well known. Canadian governments were no exception: the proportion of national income directed through government expanded vastly. Between 1927 and 1977 for example, the proportion rose from 15.2 percent to 41.1 percent in Canada.¹ This expansion of the economic role of states has obvious and far-reaching ramifications both for the relationship of government to business and for the process of economic policy formation.

During this period, government bureaucracies underwent a rapid expansion, direct intervention in and regulation of business accelerated, and governments' revenue needs and demands increased exponentially. Welfare services were introduced and expanded, especially after 1962 when the Canada Pension Plan and government health insurance programs were introduced, and income was redistributed on a vast scale to meet the revenue thirst of government.²

One response to the growth in the scale of government was organizational upheaval. After 1968, the new Prime Minister, Pierre Trudeau, built up a highly structured and integrated Cabinet committee system, intended to restore power to Cabinet ministers which had increasingly been lost to the deputy ministers as the scale and intensity of government escalated. The power, however, tended to shift to the Prime Minister and his close associates, rather than to the Cabinet *per se*. This was largely because responsibility was not clearly allocated between the various Cabinet committees:

The overall effect of this system was to have some policy questions bouncing back and forth between committees of ministers without a clear allocation of responsibility. The prime minister, however, was in a powerful position to influence the play, as indeed were his close associates, both staff and ministerial.³

In the formation of general government policy, scientists and technical experts have tended to be increasingly overshadowed by career bureaucrats specializing in interpreting trends in the political process and putting together policy packages which approximate notions of consensus policies. These career bureaucrats perform a vital function, but are often relatively lacking in knowledge about fine detail and implications of policy, espe-

1. David C. Smith (editor), *Economic Policy Advising in Canada*, Montreal, 1981, p. 3.

2. Hugh G. Thorburn, *Planning and the Economy: Building Federal-Provincial Consensus*, Ottawa, 1984, especially pp. 59-61.

3. Thorburn, *Planning and the Economy*, p. 62; Richard D. French, *How Ottawa Decides: Planning and Industrial Policy Making 1968-1980*, Ottawa, 1980, chapters 1-4; James Gillies, *Where Business Fails: Business Government Relations at the Federal Level in Canada*, Montreal, 1981, *passim*. EMR's need to coordinate with other departments in formulating policy is discussed above, chapter 4, and illustrated by appendix I.

cially its technical aspects.⁴ The expanding role of governments has made the relationship of business and government immeasurably more complex. No longer do industry and government necessarily talk the same language. No longer can either automatically assume an overall sharing of basic priorities.

Whereas there was a high degree of agreement after World War II between business and government on the need to allocate top priority to economic development, a basic change had occurred by 1970. The proliferation of newly powerful and articulate interest groups and the expanding role of the state – partially to accommodate them – led to what has been regarded by some as a breakdown in the historic consensus between business and state on material goals and priorities:

The traditional goals of growth, employment and price stability remained on the agenda, but increasingly governments gave at least equal priority to such other objectives as income distribution and quality-of-life concerns. Government no longer put growth first.

The result is that for the past 15 years Canadians have been involved in a continual series of debates over the most fundamental trade-offs within the economic system – consumption against savings, distributional fairness against efficiency, individual rights against collective 'heritage'. Most frequently government and business have found themselves on opposite sides of the argument, with government increasingly giving first priority to non-economic objectives.⁵

The institutional context of these policy changes is of interest. The 1970s were to see the decline of the policy-making power of the traditional line departments of the federal government, and the replacement of the 'mandarin bureaucrat' (the old-style power brokers) by the 'bureaucratic technicians'.⁶ These new bureaucratic generalists ran the powerful Cabinet committees and central agencies which had grown to be so dominant since Prime Minister Pierre Trudeau established the Committee on Priorities and Planning in 1968 and entrenched 'rational planning' in the federal bureaucracy generally. The committees and agencies were designed to increase collective responsibility and the input of Cabinet ministers but had the effect of drastically curtailing the influence of once omnipotent individual ministers and their deputy ministers, while greatly increasing the powers of the political strategists. Power moved to the 'person who knows

4. Centre for Resource Studies, Proceedings No. 13, *Mineral Policy Formulation: The Role of Scientific and Technical Knowledge*, Kingston, 1983.

5. Russell Harrison, Chairman of the Canadian Imperial Bank of Commerce, addressing a management conference at the University of Western Ontario, January 1983. Reported in the *Toronto Globe and Mail*, 12 January 1983.

6. French, *How Ottawa Decides*, p. 22; Gillies, *Where Business Fails*.

how the system works as opposed to the person who is an expert in a substantive area of knowledge'.⁷

The mineral policy of growth which prevailed to the 1960s was the product of input from many federal departments, provincial governments and the industry. In the 1960s, however, and particularly after the Trudeau shake-up of the federal bureaucracy in 1968, EMR moved consciously towards claiming for itself a more 'pro-active' planning role in mineral policy, a move which corresponded to developments taking place with varying speed elsewhere in the federal bureaucracy. The newly renamed department moved rapidly to develop a stronger policy orientation after 1966. But the groundwork had been laid even earlier.

EMR: From 'Custodian' to 'Manager'

From the late 1950s, W. Keith Buck, who became the Director of the Mineral Resources Branch when EMR was formed, had been encouraging the advanced training abroad of mineral economists who would augment the policy-making capacity of the Department of Mines and Technical Surveys and its successor, EMR. This policy was a notable success, and several of his protégés subsequently attained some eminence in the field of mineral policy formulation, both within EMR and elsewhere.

In the earlier period in particular, Buck stood squarely behind the policy of growth and its instruments: for example, the three-year holiday for new mines. In 1963 he told the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas in Geneva that:

It is the Canadian experience that the surest method of encouraging mineral exploration and development is by means of tax incentives, particularly those measures which permit a mining company to obtain early and complete recovery of its capital investment.⁸

The Mineral Resources Division in the mid-1960s had 30 professionals and 24 supporting personnel. By 1972 this had climbed to about 115 professionals and 60 support personnel, reflecting a greater federal emphasis on resource and mineral policy formulation. By 1982, however, the upheavals of the mid-1970s (especially the relative upgrading of energy policy at the expense of mineral policy) had contributed to cutting the staff

7. Gillies, *Where Business Fails*, p. 106.

8. W. Keith Buck, *Mineral Development Policy* MR64 (Ottawa: Energy, Mines and Resources Canada, 1963), pp. 14.

of the Mineral Resources Branch back to 80 professionals and 40 support staff.⁹

In 1966, Buck's division began a series of reports on the mineral resources and prospects of various provinces, at the request of the provinces or of agencies representing their interests. These reports are illuminating, not only about provincial mineral policy capability, but also about the development of policy analysis in EMR, how mineral policy in general should be made, and what its function should be.

The reports on Newfoundland and Labrador, New Brunswick, and Nova Scotia confined themselves largely to providing detailed profiles of the mining industries in each, and said little about policy other than to recommend larger and better-paid technical and scientific staffs.¹⁰ In each report there is a chapter on what is significantly called 'Mineral Resource Administration', which is essentially about administering existing policy rather than making policy. In the reports on Manitoba (October 1968) and British Columbia (September 1969), however, 'administration' is replaced by the concept of 'mineral resource management'.¹¹

The difference between the two concepts is 'a fundamental change of emphasis from what might be described as mineral resource custodianship to mineral resource development'.¹² Management, rather than administration, is:

assumed to imply an active role with the objective being to optimize the return to the economy from the use of minerals. In contrast, 'administration' can imply a more or less passive or regulatory role in which no attempt is made to influence the direction and rate of economic development.¹³

Minerals are seen in these reports as a public resource, exploited in the main by the private sector. This government responsibility is not only the traditional one of facilitator (establishing a political, economic, legal, social, and institutional environment conducive to development); it is also to encourage the private sector by incentives, services, and 'persuasive abilities'.

What is being sought, according to the EMR reports, is 'optimum development' rather than 'maximum development'. Optimum development is 'balanced development'. There will be conflict between various interests on the issue of development, which government should adjudicate:

9. Andrew J. Freyman, 'Mineral Policy - the last 20 years', in *CRS Perspectives*, no. 13 (Kingston: Centre for Resource Studies, September 1982), p. 1; Keith Buck, private communication, December 1984.

10. *Newfoundland and Labrador*, pp. 89-114; *New Brunswick*, pp. 107-112; *Nova Scotia*, pp. 101-126.

11. *Manitoba*, p. 18, p. 21; *British Columbia*, p. 3.

12. *Manitoba*, p. 21.

13. *British Columbia*, p. 3.

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Government is in a unique position to identify and distinguish between the interests of individual segments of the private sector, and between these and the interests of the public sector.¹⁴

How does one achieve the capacity to oversee the policy-making process in this way? The major EMR suggestion to the provinces was to create a Resource Economics and Planning Staff group, reporting directly to the Deputy Minister; i.e. a staff organization, rather than a line or operating branch.¹⁵ This type of group would enable the government to switch decisively from 'administration' to 'management':

A primary need for such a role is the internal ability to assess mineral development opportunities from a quantitative point of view using much the same techniques as industry but with additional concern for overall return to the provincial economy rather than just that part which accrues to the company concerned.¹⁶

The objectives of this increased capacity to make policy include more employment, and more stable employment; better utilization of resources (recovery, integration and further processing); a greater contribution by minerals as a base for manufacturing, further exporting and import replacement; more output and therefore more government revenue; and the more efficient utilization of the government-financed infrastructure.¹⁷

This suggested policy laid out what can only be described as a radical departure from the mineral policy of growth espoused by Buck in Geneva in 1963, which reflected federal mineral policy at the time, and the first three provincial reports prepared by EMR. The later policy advocates active intervention, though not yet intervention in its 1970s sense of direct government takeovers and regulatory policies designed to coerce specific developments. A simple mineral policy of growth, according to which the benefits would 'trickle down' to other groups in Canadian society, was thus replaced by the concept of optimum or balanced development, in which government plays an important (redistributive) role in determining which interests should get the fruits of development.

The new policy was not only redistributive. It also advocated a concentrated effort by government to develop new project ideas and to encourage their being put into effect. The change in the perception of government's role – from facilitator to active participant, from administration to mineral management policy – could hardly have been more complete.

This policy was not, of course, suggested by EMR to the provinces with the idea that EMR would retain its traditional federal role as mere custodian.

14. *Ibid.*, pp. 3-4.

15. *Ibid.*, pp. 21, 25.

16. *Ibid.*, p. 39.

17. *Ibid.*

The ground was also being prepared for EMR to play a similar role in the formulation of federal mineral policy. In an important paper, first presented in 1970 to the United Nations Mineral Economics Seminar in Ankara, Turkey, Buck and his Research and Planning Division Chief, Robert B. Elver, laid out an approach to mineral policy formulation which had as much (or more) relevance to Canada as to the Third World to which it was addressed. The paper was republished subsequently in Ottawa.¹⁸

The paper begins by making the crucial point that mineral policy 'comprises only one element of total national policy', must 'contribute to overall national objectives', and can only be formulated, modified, or implemented 'in the light of national objectives'.¹⁹ Canada's national goals were described as comprising a package of economic, social, cultural, political, sovereignty and defence objectives:

...rising levels of per capita real income with minimum unemployment, inflation, cyclical instability, and environmental destruction; rising absolute levels of population and output to maintain and improve Canada's position in the world community; a favourable balance of payments; and a measure of equitable distribution of income among the population and equitable development among regions.²⁰

Bearing these national objectives in mind, Buck and Elver suggested that the general objective for mineral policy should be:

...to develop and utilize the nation's mineral resources to optimize through time their net contribution to the attainment of national objectives.²¹

From this, they isolated 15 elements of a national mineral policy, the importance of each to vary according to both national and international circumstances:

- to maintain adequate domestic supplies of minerals;
- to establish stable land tenure, regulatory and environmental regimes;
- to encourage further processing of minerals in the producing country;
- to encourage domestic ownership and control and to optimize benefits from foreign capital invested in mining;
- to enhance competitive position in world markets;
- to provide the necessary infrastructure for mineral exploitation;

18. W. Keith Buck and R. B. Elver, 'An Approach to Mineral Policy Formulation' Mineral Information Bulletin MRI08, Mineral Resources Branch, (Ottawa: Energy, Mines and Resources Canada, 1970).

19. *Ibid.*, pp. 1-2.

20. *Ibid.*, p. 2.

21. *Ibid.*, p. 7.

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- to ensure the availability of technical and economic information and data;
- to facilitate regional development;
- to ease dislocations of mine closures and speed up adjustment to change;
- to conserve resources and ensure optimum recovery;
- to achieve maximum environmental quality;
- to maximize access to foreign markets and ease trade barriers;
- to ensure that minerals contribute equitably to the nation's tax revenues;
- to increase technical and managerial skills, especially via training of indigenous peoples; and
- to ensure that minerals contribute to and reflect general government social, economic, developmental, strategic and sovereignty policies and goals.²²

Finally, Buck and Elver, having exhaustively and perceptively outlined the elements of mineral policy, return to the vital necessity to integrate mineral policy into national development policy:

...there is considerable merit in the issuance of a statement, by the head of state or minister responsible for the minerals sector of the economy, of both the nation's general national objectives and its specific mineral resource objectives, along with a description of the principal elements which comprise the nation's mineral policy. This procedure has the advantage of setting at the highest level, the general governmental environment in which mineral exploitation will take place in the nation. It articulates...the philosophy of the nation as it relates to mineral exploitation.²³

This emphasis on the connection between mineral policy and development policy is significant for two reasons. First, it tended to be forgotten in the efforts to formulate an overall mineral policy in the 1970s and early 1980s, with undesirable consequences, as we shall see. Second, it reflected the behind-the-scenes struggle of Buck and Elver at the time to get the federal government as a whole to commit itself to a national mineral policy.

In November 1969, EMR was asked by the Privy Council Office to prepare a paper on the mining industry to help in its task of devising various 'possible constitutional options'. The paper was to include a review of present and probable future trends related to mineral resources; the present and future impact of these trends on the role of the public sector at all levels

22. *Ibid.*, pp. 7-13.

23. *Ibid.*, p. 14.

of government; and an opinion as to what level of government, acting separately or jointly with others, is best suited to respond to the problems and trends identified.²⁴

The brief to EMR thus focused on the jurisdictional boundaries between federal and provincial governments in the area of minerals. The federal government was growing increasingly concerned at being excluded from the full benefits of mining's great expansion of the 1950s and 1960s by Section 109 of the BNA Act. To some extent EMR responded to this federal brief, though cautiously. But it also chose to use this request from the Privy Council Office as an opportunity to press for wider and more intensive federal efforts in the area of mineral policy.

Buck and Elver, as we have seen, understood clearly that a national mineral policy could be successfully devised only in the context of a national economic development policy. They seized the opportunity to introduce the necessity of a national mineral policy in the federal bureaucracy by utilizing the looming federal-provincial issue. They did this by arguing that a mineral policy was only possible under the leadership and coordination of the federal government, after intensive consultation with the provinces.

With hindsight, it seems ironic that the only way EMR could get the federal cabinet to take national mineral policy seriously was in the context of federal-provincial relations; yet it was on the rocks of this relationship that the quest for a universal policy was to founder in the 1970s.

In line with the increasingly interventionist approach being suggested in EMR, the 1970 paper called for greater direct government – especially federal government – involvement. The new public concern about the 'quality' of mining development rather than its 'quantity' provided a useful lever and justification for a more extensive federal role:

Public concern is accelerating rapidly on such issues as environmental quality, conflicts between land uses such as resource exploitation versus parks and recreation, foreign ownership and control, and export of largely unprocessed resource commodities... This concern, and resulting demand for industry legislation and control, has important implications for mineral resource management.²⁵

Not content with calling for more intervention, the paper even went so far as to suggest that the mining industry, traditionally a staunch supporter of *laissez faire* doctrine, would welcome greater federal involvement:

Government authorities should more positively establish standards within which the mineral industry should operate. The absence of reasonable

24. Mineral Resources Branch, Energy, Mines and Resources, 'Mineral Management and Federal-Provincial Relations', MR1436/70, Ottawa, April 1970, p. 1.

25. 'Mineral Management and Federal-Provincial Relations', p. 25.

standards is not in the interest of either government or the industry and, in fact, industry would undoubtedly welcome establishment of realistic standards. Relative to many other countries, Canada can be classified as overly *laissez faire* on industry behaviour.²⁶

Overall, however, the paper did not make any radical recommendations for changes in the constitutional relationship of federal and provincial governments. Its suggestions for regular and institutionalized consultation with provincial mineral departments were to bear fruit, but only later.

The next serious opportunity to proceed with the formulation of a mineral policy occurred a few months later, in September-October 1970, when Prime Minister Pierre Trudeau wrote to the Minister of Energy, Mines and Resources, J.J. Greene, asking him to review Canada's water needs and energy policy. Greene responded by offering, in addition, a review and redefinition of Canada's national mineral policies, and a rationale for a single coherent policy:

Canada presently lacks a consensus on the attitudes and needs that should be expressed through a coherent policy relating to minerals and their use for the national interest. Current industry and public attitudes are the outgrowth of a frontier period, when the resource industries were the principal components of our industrial base. The attitudes of Canadians toward ownership and use of their mineral heritage is changing. Likewise changing international developments may well remove some of the temporary advantages we now share as a source of certain mineral commodities.²⁷

The Minister then went on to outline the proposed report in some detail, including a consideration of 'managing' foreign investment to obtain higher returns for 'Canada'. This issue, he said, had already been the subject of close consultations between EMR staff, and Minister Herb Gray's staff in the Department of Industry, Trade and Commerce. Finally, he questioned the mineral policy of growth, and cogently put the argument for the emerging mineral policy of redistribution:

The question is now raised, 'Does bigger mean better?' Certainly the mineral industry has replied in the affirmative. With a future objective of improving the economic well-being of every citizen through the utilization of mineral resources, the reply is less positive. Problems of environmental deterioration and the responsibilities of industry to its employees and their communities raise a number of doubts. I would hope that our proposed study would provide a means for government to provide clear guidelines for the industry in the seventies and beyond.²⁸

26. *Ibid.*

27. Energy, Mines and Resources, 'Progress Report on National Mineral Policy Objectives', MR1487/71, Ottawa, July 1971, appendix A: 'Terms of Reference'.

28. *Ibid.*

Within a week the Prime Minister replied, authorizing EMR to go ahead with the study. He warned that it would be a complex task because of the different policy requirements of different minerals, but said that a comprehensive review of mineral policies (he avoided the singular) would be helpful in providing 'a coherence for the total picture'.²⁹

The report, which drew on the earlier report to the Privy Council, but expanded it into a fully-fledged and detailed mineral policy review, was completed by July 1971. It made explicit its philosophical differences with Canada's past mineral policy of growth, and in three succinct points outlined the radical differences between it and the proposed new mineral policy.

1. It was recognized that world price mechanisms alone, without government interference, 'cannot ensure the optimum allocation of resources to generate the maximum stream of net social benefits to Canadians'.
2. The need for coordination of all levels of government had increased, suggesting that a 'strict adherence to the allocation of powers conferred by the BNA Act' should now be modified (thus institutionalized coordination should to some extent replace competition, whether among provinces or between them and the federal government).
3. The economic theory of comparative cost advantage (which asserts that trading countries should specialize in producing those commodities in which they have a comparative cost advantage and exchange them for commodities in which they have a comparative cost disadvantage) was rejected as based on unrealistic assumptions. 'Indeed, adherence to this doctrine has accounted in part for Canada's failure to recognize the opportunities its mineral resources afforded for balanced sectoral and regional growth' (i.e. to diversify into, among other things, manufacturing).³⁰

From this concise viewpoint, a large number of consequences flow. The major one is that the federal government should begin to play a far more active role in mineral policy, *vis-à-vis* both the industry itself and the provinces. The benefits flowing from the industry need to be redistributed, not only to voters and citizens, but also to other industries, which could provide more 'balanced sectoral and regional growth'.

The primary goals of a national minerals policy, the report argues, is 'the development of the nation through the use of minerals'. This is to be achieved through 11 major mineral policy 'objectives':

- improve mineral policy management;
- extend, strengthen and diversify the economic base;

29. *Ibid.*

30. *Ibid.*, appendix D: 'Background note on minerals and national goals', pp. 2-3.

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- foster a viable mineral industry;
- ensure mineral supply for national needs;
- improve mineral material conservation and use;
- improve returns from exportable mineral surpluses;
- enhance social development;
- harmonize development and multiple-resource use;
- improve environmental quality;
- contribute to orderly world development; and
- increase national self-determination.

It is notable that these 'objectives' are similar to the 15 'elements' of a national mineral policy advanced earlier by Buck and Elver, but only superficially. There was a crucial change in emphasis and a major reason for this was the role of Jack Austin, Deputy Minister of Energy, Mines and Resources from 1970-75, and a great interventionist. There were other important personnel changes. Buck left EMR in 1973 for a position with the Canadian High Commission in London, before joining the International Lead and Zinc Study Group in the United Kingdom in 1977 as Secretary-General. Elver was made leader, in the early 1970s, of the task force producing the EMR 'Progress Report on National Mineral Policy Objectives'.

The changes can be summarized by comparing 'element 5' of Buck and Elver (improving competitive position in world markets) with 'objective 6' of the EMR paper (improving returns from exports). Buck and Elver, to paraphrase the late U.S. President Kennedy, were more concerned to ask what the federal government could do for mining than what mining could do for the government. The EMR paper reversed that emphasis. Some of the provinces were also thinking increasingly at the time about what contribution mining could make to their needs. Thus, although EMR and the federal government had already privately started challenging the contemporary appropriateness of Section 109 of the BNA Act, there was still a great deal of common ground between the federal and provincial governments on the issue of mineral policy. The studies of provincial mineral policy done for various provinces by the federal government had created goodwill and some common ground, and the two levels of government now embarked on a concerted effort (unlikely as it may seem from their increasingly divergent interests in the mining industry) to formulate a national minerals policy.

The Federal-Provincial Quest for a National Mineral Policy

During the period 1972-74 there was a commodities boom. While both the federal government and some of the provinces moved to capture a greater share of growing revenues, there remained a residue of common interest

between the two in terms of replacing the old mineral policy of growth with some variant of a redistribution policy. Thus a parallel and ostensibly contradictory process now occurred, of (a) conflict over taxation and revenue; and (b) attempted cooperation over the formulation of a mineral policy.

In early 1973 ministers responsible for mineral policy in their respective provincial governments and in the federal government (where the EMR minister was Donald S. Macdonald) held a series of meetings which sought greater cooperation between governments in formulating policy. On 13 April 1973 they issued a communique agreeing on the development of a formal mechanism for consultation which, they argued, was 'essential for the formulation of mineral policies that are national in scope'. They also authorized the publication of a document *Mineral Policy Objectives for Canada* which was to form the basis for future ministerial discussions.³¹ The document argued that:

the first need is for national objectives that are sensitive to both federal and provincial aspirations, and which will provide a basis for integrated inter-governmental analysis of social, economic, institutional and behavioural data for action on complex issues.³²

Relating its task to the national policy themes enunciated in the White Paper on Foreign Policy for Canadians, published shortly before, the Ministers suggested that 'the goal of mineral policy must reflect public aspirations if it is to receive public support. It must also be acceptable to all levels of government and industry.'³³

It is striking that industry was introduced here almost as an after-thought: the continued existence of the industry, its health, growth and future as an assured source of benefits for 'Canada' was taken almost for granted. This can probably be explained partially by the commodities boom then taking place, but the shifting of the producers from their previous place at the centre of the stage was nevertheless a radical change in the process of formulating mineral policy.

Mineral Policy Objectives then outlined a policy goal and linked it with 12 explicit policy objectives: the document presented these in the graphical form of a wheel in which the core 'goal' radiates out into the 'objectives' (see figure 1). The 12 objectives were synthesized in three broad categories: quality of life; sovereignty and unity; and economic growth and development.³⁴

31. *Mineral Policy Objectives for Canada: A Statement by Federal and Provincial Ministers Responsible for Mineral Policy*. Ottawa, 1973. Published under the authority of various Mines Ministers.

32. *Ibid.*, p. 14.

33. *Ibid.*, p. 16.

34. *Ibid.*, p. 19.

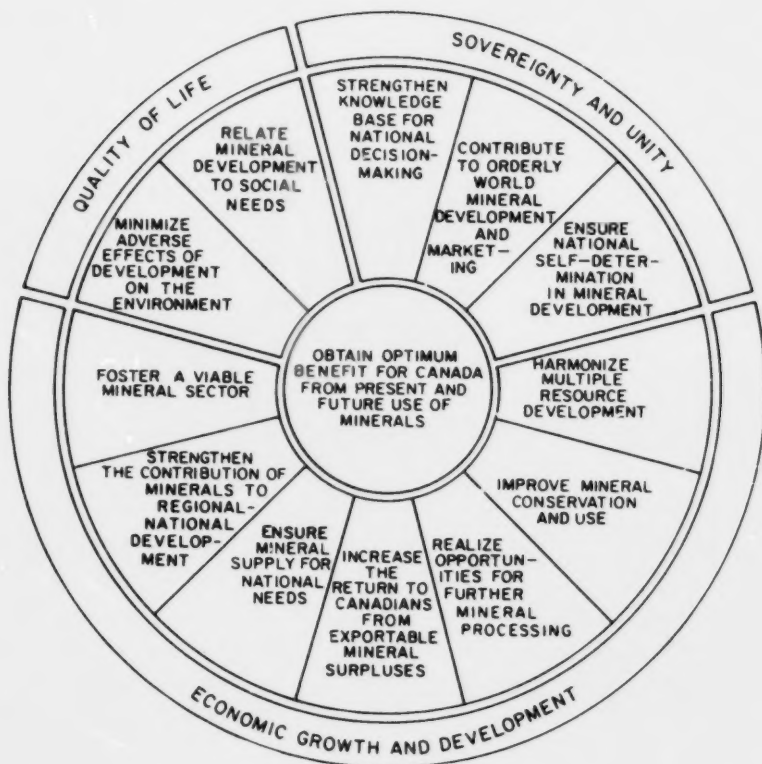


Figure 1. Mineral Policy Goal and Objectives

Source: *Mineral Policy Objectives for Canada: A Statement by Federal and Provincial Ministers Responsible for Mineral Policy*, Ottawa, 1973.

Significantly, the goal and objectives were almost identical to those suggested in EMR's internal 'Progress Report on National Mineral Policy Objectives', published in July 1971. The only changes were some minor shifts in emphasis and the addition of one objective (which genuflects to the federal-provincial provenance of *Mineral Policy Objectives for Canada*): 'Strengthen the contribution of minerals to regional-national development'.

Both documents had as an objective the fostering of 'a viable mineral sector', but the discussion made clear that this was not a pressing objective. This was not because of any special indifference to industry, but because the

industry's continued strength tended to be taken for granted by governments at the time.

The Ministers concluded *Mineral Policy Objectives* by reiterating their commitment to develop a more formal mechanism of policy coordination: 'Such a mechanism is essential for the formulation of policies which are national in scope.'³⁵

The federal and provincial governments had initially agreed on a 5-phase review process:

- definition of the mineral policy goal and objectives;
- delineation of the emphasis to be placed on objectives;
- definition of appropriate strategies and tactics to achieve the priority objectives;
- implementation of these policy strategies and tactics;
- evaluation of results, and policy adjustments if necessary.

Mineral Policy Objectives for Canada was considered to have completed phase one and the next step was the choice of priorities among the 12 objectives.

On 23 November 1973, the Canadian Ministerial Conference on Mineral Policy was established to formalize the previous arrangement for consultation on mineral policy between branches of government. The ministers agreed that

intergovernmental consultation in the field of mineral policy means intergovernmental dialogue that takes place early enough in the policy making process so that the federal and provincial governments have the opportunity to influence each other's views. Intergovernmental consultation does not necessarily imply agreement.

While it may be possible and desirable to achieve intergovernmental consensus on some issues, the Conference should not be viewed as a joint decision-making body.³⁶

Thus the Ministerial Conference defined itself largely as a consultative and consensus-building body, which could not deal with all issues of joint concern, especially not with short-term crises:

In this context, while the number and intensity of such situations might be reduced through the functioning of the Conference, future success will be related to consultations on medium- and long-term issues.³⁷

35. *Ibid.*, p. 34.

36. 'Towards a Mineral Policy for Canada: Opportunities for Choice', published under the authority of various Mines Ministers, Information Canada Cat. No. M37-21/1875, Ottawa, 1974, p. 20.

37. *Ibid.*

The ministers were at pains to emphasize that policy decisions remained the responsibility of individual governments. They agreed that the conference would be chaired jointly by the federal Minister of Energy, Mines and Resources, and the provincial Minister hosting the annual Provincial Mines Ministers' Conference.

It was decided that in 1974, the Conference would focus on questions pertaining to uranium policy; the respective roles of federal and provincial governments in the control, management and disposal of minerals; and further development of a Canadian mineral policy. The next step in the development of policies for minerals, it was decided, was the choice of priorities in order to obtain the best benefits from minerals for Canadians.³⁸

In the next year, considerable staff work appears to have been done by the mines ministries in laying out alternative internally-consistent mineral policies. The first meeting of the Ministerial Conference on Mineral Policy did not take place until 6 December 1974, but the issue was not shelved in the interim. Donald Macdonald, EMR's minister, continued to push publicly and emphatically for an overall national mineral policy:

...like many other mineral producing countries, Canada lacks a comprehensive policy expressing the laws, regulations and attitudes that relate minerals and their use to the national interest. Canada's mineral policy is in fact many policies that apply to specific sectors of the industry or the mineral industry as a whole. However, this is no longer good enough.³⁹

At the December 1974 meetings, the ministers considered four basic scenarios for alternative mineral policies which developed out of the 12 objectives outlined in the 1973 document, *Mineral Policy Objectives for Canada*. The scenarios recognize explicitly that some of the 12 objectives are mutually incompatible. Thus the four options laid out by the 1974 document *Towards a Mineral Policy for Canada* are a distinct advance over the 12 objectives of 1973. The four basic options were as follows.⁴⁰

Option 1. Continue, as in past decades, to encourage maximum mineral production. This option was basically similar to the policy followed in the 1950s and 1960s. It emphasizes the need for a favourable investment climate and it presupposes that:

– the market system satisfactorily distributes benefits from minerals;

38. *Ibid.*, p. 21.

39. Donald Macdonald, 'Mineral development in Canada: a look at the 70s and Beyond', *Western Miner*, vol. 47, no. 4, 1974, cited in Caragata, 'Non-Fuel Resources Minerals and Canadian Foreign Policy', p. 109.

40. *Towards a Mineral Policy for Canada*, pp. 14-15.

- economic development based on minerals automatically arises when and where it is economically feasible;
- government support of the mineral industry will generate the best possible benefits for Canadians.

Option 2. Encourage economic diversification and growth through increased mineral processing and mineral-based manufacturing in Canada. This option addresses itself to the need for both regional development and linkages of the mining industry to other sectors of the economy and it presupposes that:

- appropriate policies will achieve greater mineral processing, fabricating, mineral-based manufacturing and intersectoral linkages over the long term through a mixture of private and public investment;
- Canada can develop a self-sustaining, diversified industrial structure beyond the year 2000 that will become less dependent on our mineral resources as a main vehicle for development.

Like Option 1, this is a variation on an old theme as, for example, the dispute surrounding the 'nickel question' (see chapter 3) demonstrates.

Option 3. Obtain the highest possible net financial returns to Canadians from minerals. This option is concerned with increased returns for all Canadians, not just the mining companies. The additional revenues, naturally, would be distributed by governments, both federal and provincial, 'in support of other priorities and alternative economic and social opportunities'. Such a policy presupposes that:

- governments can obtain increased net revenues from minerals through such means as higher taxes, royalties, reduced government expenditures in support of the industry, public equity participation, or higher export prices, without disproportionate effects on mineral sector development;
- governments' shares of these revenues will be redistributed effectively in support of other priorities according to the objectives of each government;
- postponed development will permit higher returns from minerals in the future.

This option was particularly appropriate to the 1970s, in which government policies exhibited a continuation of the growing revenue thirst of the 1960s, leading to the strengthening of redistributive policies in general.

Option 4. Conserve mineral resources for long-term domestic requirements. This option drew strength from the Club of Rome⁴¹ and OPEC-induced panic about the world's natural resource supplies at the time, and it presupposes that:

- Canada is in danger of depleting its minerals too rapidly;
- minerals left in the ground will not become obsolete through new discoveries elsewhere, substitution, or technological change;
- postponed development will permit better benefits from minerals in the future;
- other economic activities will compensate, both nationally and regionally, for delayed growth in the mineral sector if further mining development is postponed.

Thus, *Towards a Mineral Policy for Canada* recognized quite explicitly at least three distinct mineral policies which Canada might adopt (option 4 is really a particular variant of option 3 rather than a distinct policy) and was quite clear on the necessity for making choices between the policies rather than merely aggregating them all.

The question remains whether *Towards a Mineral Policy for Canada* succeeded in completing phase two of the federal-provincial review process, as it claimed. It did attempt a 'delineation of the emphasis to be placed on objectives', and started off by an ostensibly firm commitment to option 2:

Mineral policy should first seek, whenever possible, to increase diversification and growth of national and regional economies based on minerals. This would include not only increased mineral processing but also more mineral-based manufacturing prior to export, and strengthened ties with other sectors of the economy.⁴²

It then went on to suggest the concrete circumstances in which a shift of emphasis to option 3 would be desirable:

In cases where increased mineral processing and mineral-based manufacturing are not feasible, desirable, or economic, mineral policy should then seek assurance that Canadians are obtaining the best return from mineral exports.

Under certain circumstances, it may be desirable to modify the rate at which economic diversification or increased financial returns are sought from minerals. For example, mineral policy should seek conservation for future use or stretched-out development where there is a possibility of

41. See Donella H. Meadows et al., *The Limits to Growth: A report for the Club of Rome's project on the predicament of mankind*, New York, 1972.

42. *Towards a Mineral Policy for Canada*, p. 4, p. 17.

depletion, or when the stability of Canadian communities is threatened by too rapid mineral exploitation, or when very high rates of investment affect economic stability.⁴³

This is a reasonable and subtle way of choosing between policies, which after all derive their attractiveness at least partially through contingent circumstances beyond the reach of mineral policy. External factors, such as internationally determined commodity prices and the changing impact of interest group pressure, obviously impinge on mineral policy. They make it essential for policy to be able to adapt rapidly to changing circumstances.

The key is the need to adapt in an orderly way, adhering as far as possible to the priorities which the policy-making process had methodically laid out. To do this, to avoid being swept along by the latest event or political pressure, it is necessary to elucidate very clearly in advance which policy (or strategy) would probably be most desirable for dealing with different sets of possibilities in the future. *Towards a Mineral Policy for Canada* attempted this in a way which was simple but effective: it asked which policy is thought to cater best for which particular hypothetical situation.

At this stage, however, the commitment to choose among the original 12 objectives began to waver. The Ministers introduced several other objectives without distinguishing what priority was placed on them, or why:

Consideration also must focus on the need: to favour greater Canadian participation in a viable mineral sector; to seek better regional distribution of activities; and to minimize environmental damage.

Whatever direction mineral policy may take in the future, the first consideration must be to assure an adequate supply of minerals, whether from domestic or foreign sources, to meet Canadian needs.

Although the overall balance and emphasis of policy will change over time, and need not be uniform throughout Canada, mineral policy must maintain its general goal of obtaining the best benefits for Canadians from minerals.⁴⁴

Thus, the only option which was apparently rejected was option 1, the traditional mineral policy of growth which had been so dominant in the 1950s and 1960s. The other three possible policies, all redistributive in nature, were all endorsed. Significantly, there was a slight preference for the policy of economic diversification and growth, which was also a mineral policy with a long history in Canada.

43. *Ibid.*, pp. 4, 17-18.

44. *Ibid.*, pp. 4, 18.

Some of the reasons for avoiding the central issue – a clear decision on policy direction – are only too obvious. The most obvious was the division of jurisdiction between the federal and provincial governments. *Towards a Mineral Policy for Canada* succinctly, if indirectly, outlined the problem:

The provincial governments own the mineral resources within their boundaries, and have broad powers that affect the management and rate of development of these resources. The federal government has broad powers in fiscal and monetary policies, interprovincial trade and transportation, external affairs, and in other areas affecting the national interest. In addition it has responsibility for mineral affairs in the Yukon and Northwest Territories and in the other areas that fall under its jurisdiction.

Because of the nature of the mineral system and the division of powers among governments, neither the federal nor provincial governments can encompass the full spectrum of mineral policy.⁴⁵

Thus, although the Ministerial Conference was successful to some extent in bringing about a degree of consultation between and among federal and provincial governments, it was far less effective in achieving a more integrated mineral policy. It had achieved a general consensus on aims – one of its prime goals – but not a consensus on priorities. Avoiding choices in this way and concentrating on general aims on which diverse groups will all agree led to an inexorable return to the fruitless exercise of praising 'motherhood'. Thus, although the consensus-building function of the Ministerial Conference should not be belittled (it could have become significant if it had not been so gratuitously shattered by external factors in the next three years), it stopped short of the crucial choices demanded in the formulation of a mineral policy.

The very definition of mineral policy adopted by *Towards a Mineral Policy for Canada* embodies all the tensions and ambiguities which resulted in its ducking the task it explicitly set itself. Mineral policy, it argues (p. 17) is

the sum of government decisions and actions that influence the mineral system, and the way in which the system itself affects the economy and the society in general. Its elements are diverse and continually changing.

All elements of strategy which are normally contained in the concept of mineral policy, all indications of creating a hierarchy of priorities (which the document claimed to be doing), are completely absent from this definition. Not surprisingly, then, the promised priorities did not emerge. But at least the document did recognize that, though various policy options exist, some or all of them are contradictory or inconsistent. Thus the mere process of detailing the options and emphasizing that a choice would have to be made was progress of sorts. As Donald Macdonald put it the same

45. *Ibid.*, p. 12.

year, it recognized that the present situation – operating hand to mouth in an *ad hoc* fashion – was ‘no longer good enough’.

The opportunity to go on at this stage and make choices between the various options was, however, never followed up. Instead, EMR embarked on a major series of 19 detailed specific studies, most of which were published in 1976. They dealt with diverse topics such as individual commodities (asbestos, copper, gypsum, iron ore, nitrogen, phosphate, potash, sulphur and zinc), labour needs, women in mining, the environment, and energy needs.⁴⁶

The studies may have shown the provincial governments the necessity of developing their own capability to handle issues relating to mineral development. Thus a federal bureaucrat has argued that the studies forced the provinces to face up to the many differences on the issue of mineral development between the federal and provincial governments, and to acknowledge that these problems were more than somewhat intractable.⁴⁷

Nevertheless, the EMR series (whatever its merits as a source of detailed information about Canada’s mineral industry) was of little significance in the quest for a comprehensive mineral policy incorporating an ordered set of priorities. It was essentially background work which appears to have been published once it became clear that the general process of federal-provincial collaboration in formulating a national mineral policy had stalled, or perhaps even died. The movement to phase 3 (‘definition of appropriate strategies and tactics to achieve priority objectives’) confidently and urgently called for by the ministers in *Towards a Mineral Policy for Canada* in 1974, was not to occur.

A large part of the reason for this failure was undoubtedly the formidable obstacles posed by the political and constitutional realities of the federal-provincial relationship in Canada (which will be dealt with in more detail below). But it should also be said that these realities were not solely culpable. There was also a failure of political will, both by politicians and bureaucrats, in that they were to some extent responsible for allowing the genuine clashes of interest in the mineral sector to submerge what were and are potentially far larger shared interests in the health and ordered development of Canadian mining. This failure turned out to be an expensive one for governments, the industry, and Canadians generally. The turmoil and internecine conflict created confusion and instability in the industry, frightened off investors and resulted in missed or delayed opportunities in the industry.

46. Andrew J. Freyman, ‘Mineral Policy – the last 20 years’ in *CRS Perspectives*, September 1982, p. 2.

47. Jean-Paul Drolet, *Canadian Minerals in a Changing Environment: Elements of Mineral Economics with a particular reference to the Canadian Mineral Industry* (Ottawa: Energy, Mines and Resources Canada, 1983), p. 6, 10.

5. The Mineral Policy of Redistribution 1970-78: Revenue and Taxation

The strong growth of the mining industry in the period from 1945-70 (see tables 1 and 2, chapter 3) was of great significance to federal and provincial governments, who were themselves undergoing growth phases over the same period. Mining became of major significance to governments over this period, both as an employer and as a source of revenue. In the 1970s, as table 3 shows, the industry ostensibly continued to grow until the downturn of the early 1980s.

However, as table 4 indicates, the growth of the 1970s was largely dependent on higher prices and inflation, rather than increases in physical production.

Some sectors of the mining industry, such as coal, uranium and potash, grew strongly in terms of physical production in the 1970s, but most showed slow or negative growth. Table 5 shows production levels for 10 major mineral commodities.

In addition to the weakening of physical growth of the nonfuel mining industry, it was also increasingly overshadowed by the post-OPEC boom in the oil and gas sector. Metals in particular showed a decline in relative importance, as shown in table 6.

Table 3

CANADA, VALUE OF NON-FUEL MINERAL PRODUCTION 1970-83
(\$ million)^a

Year	Metals	Industrial Minerals
1970	3,073	931
1975	4,794	1,900
1976	5,073	2,266
1977	5,988	2,612
1978	5,698	2,986
1979	7,951	3,514
1980	9,697	4,201
1981	8,684	4,476
1982	6,874	3,709
1983p	7,238	3,605

Sources: Energy, Mines and Resources, Statistics Canada.

^a Current dollar values.

p = Preliminary

Table 4

MINING'S RELATIVE PERFORMANCE, 1970-81

Year	Index of Mining Production 1971 = 100	Consumer Price Index 1971 = 100	Index of Gross Domestic Product 1971 = 100
1970	98.7	97.2	94.4
1971	100.0	100.0	100.0
1972	104.4	104.8	105.2
1973	117.8	112.7	114.2
1974	114.0	125.0	119.3
1975	100.9	138.5	120.4
1976	103.1	148.9	126.4
1977	106.1	160.8	130.1
1978	97.8	175.2	134.4
1979	107.1	191.2	139.3
1980	109.6	210.6	139.8
1981p	103.3	236.9	143.3

Sources: Energy, Mines and Resources, Statistics Canada.

p = preliminary

Thus the 1970s were a period in which physical growth of the mining industry slowed to stagnation point and some declines were experienced. Notable exceptions were potash, oil and gas and energy-related minerals such as uranium and coal. It was also a period of decline for hardrock mining, relative to oil and gas. These declines were masked by higher prices and steeply escalating inflation. The industry was therefore not nearly as able to survive a frontal fiscal assault as it appeared to be at the time. The objectives of government policy at the time were not, of course, to stifle the growth of the industry, but to distribute its fruits more widely. At another time, a moderate policy of redistribution might well have been largely compatible with a mineral policy of growth. At this time, with the industry far more fragile than it appeared superficially, the mineral policy of redistribution had the effect of largely supplanting the old mineral policy of growth.

As has been pointed out above (see chapter 2), mining developments and mineral policy, though obviously closely connected, do not correspond exactly. The strength of nonfuel mining in the 1950s and 1960s called forth policy responses from governments, initiated in the early 1960s, to deal with what was increasingly regarded as a 'mature' industry, no longer in need of special incentives. These policy responses, most notably in the area of taxation, were not fully implemented until the mid-1970s, when the position of the industry – relative both to other sectors and to its own former strength – was very different. This policy 'lag' also occurred in the fuels

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Table 5

PRODUCTION OF 10 CANADIAN MINERALS, 1970-83 (thousands of units)

	1970	1980	1983p
Cement - t (metric)	7,208	10,270	7,826
Coal - t	15,063	36,677	44,250
Copper - kg	610,275	716,352	624,998
Gold - g	74,939	55,092	70,746
Iron ore - t	47,458	49,054	32,382
Nickel - kg	277,489	184,799	121,836
Potash - t	3,103	7,189	6,203
Sand Gravel - t	183,845	276,452	199,293
Uranium - kg	3,724	6,739	7,035
Zinc - kg	1,135,708	883,683	970,803

Source: Statistics Canada

p = preliminary

Table 6

METALS AS PERCENTAGE BY VALUE OF CANADIAN MINERALS, INCLUDING OIL AND GAS, 1945-82

Year	Percentage
1945	63.5
1950	58.9
1955	56.2
1960	56.4
1965	51.4
1970	53.7
1975	41.0
1980	29.9
1982	21.3

Source: Energy, Mines and Resources Canada

sector, where federal energy policy responded in 1980 to the boom of the mid to late 1970s with the National Energy Program, a policy designed for a growing, rather than a slowing, sector. Provincial energy policy, reflecting a relatively less complex balance of interests, responded faster. Alberta, for example, took unilateral action in 1973-74 to extend the royalty concept.

There are three basic protagonists in the revenue and taxation issue: the producing companies, the federal government, and the provincial governments. All play a crucial part in the development of mineral policy in the period to 1978. Thus, for convenience, their interaction will be considered together. But it should be pointed out that the revenue issue affects two

distinct areas of mineral policy as it developed in the 1970-78 period: public and private sectors; and federal and provincial governments.

The major struggle between the three basic protagonists for maximum possible shares of the rewards of Canadian mining is reflected in the new emphasis on a mineral policy of redistribution rather than one of growth. Thus this section will first recount briefly the struggle for revenue share, and then examine the policy implications underlying the struggle.

The Fight for Revenue

The tax concessions made to mining in the period from 1936 to the 1950s, previously renewed annually, were made 'permanent' by the federal budget of 1955 (see 'Taxation Policy' in chapter 4). Naturally, the mining industry incorporated this favourable tax regime into its long-term planning and large investments were made whose viability depended on its continuance.

Mineral privilege had become well entrenched in Canadian tax practice. There is no doubt that this meant considerable prosperity for a number of mineral companies. However, until the appointment of the Royal Commission on Taxation, there was very little serious discussion of the ends, and almost none of the means, of mineral tax policy.¹

At the time, the mining industry saw itself as enjoying very favourable tax treatment. As one industry spokesman put it

In some respects, the industry in Canada enjoys a tax status which is the envy of other industries, and which, for considerate and incentive treatment, would be hard to duplicate in any other country in the world.²

But the same spokesman presciently warned about the dangers of being complacent about the tax status then enjoyed.

The Carter Commission, with a general brief to make recommendations to improve tax laws and administration, quickly perceived the generous treatment offered to mining and broadened the inquiry to examine the issue. Its report, released in February 1967, considered mining as well as other areas of taxation. Its recommendations were opposed by both the industry and the provinces and the federal government hesitated to act on them. In essence, the commission advocated a concept of 'tax neutrality', according to which all sectors of the economy should be taxed at equal rates. Mining, it was argued, was under-taxed. More than two years later, on 7 November 1969, the Benson White Paper was published, incorporating

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1. M.W. Bucovetsky, 'The Mining Industry and the Great Tax Reform Debate', in A. Paul Pross (editor), *Pressure Group Behaviour in Canadian Politics*, Toronto, 1975, p. 93.
 2. V.C. Wansbrough, 'The Three T's - Taxes, Tariffs and Trade', *Canadian Mining and Metallurgical Bulletin*, August 1964, p. 836. See also Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', p. 121-22.

some diluted proposals from the Carter Report. Once again, it was received with some hostility and not acted upon. Finally, Bill C-259, a proposal to amend the Income Tax Act, was introduced on 18 June 1971 and became law on 1 January 1972.

The new Act's provisions backtracked on many of the recommendations of the Carter Commission, but its ramifications for the mining industry were nevertheless extensive. Some of its major effects were:³

- the three-year tax exemption for mines, initiated in 1936, to be phased out, effective 1974;
- the exemption from taxation of prospectors' and grubstakers' profits, initiated in 1941, to be phased out, effective 1971;
- the automatic depletion allowance of 33 1/3 percent, initiated in 1934-35, was replaced with an earned depletion allowance of 33 1/3 percent for mine and processing facilities, effective 1977;
- deductions for domestic exploration and development costs were left unchanged at rates up to 100 percent, and extended to foreign operations as well;
- termination of the deductibility of provincial mining taxes and royalties in computing federal taxes, to become effective 1977. Deductibility had been in effect since World War II, allowing deduction provided provincial mining taxes and royalties conformed to various conditions, and giving the federal government *de facto* control of provincial fiscal policies. This termination, then, would have the effect of uncoupling the federal and provincial tax systems, and giving the provinces more autonomy. At the same time, to compensate for the proposed non-deductibility of provincial mining taxes and royalties (i.e. a heavier federal tax burden), the federal government would cut its tax rate on mining income by 15 percentage points.

Soon after, a number of provinces, encouraged by the commodities boom of 1972-74, substantially increased provincial mining taxes and royalties. The federal government responded in two 1974 Budgets to the threat of a substantial erosion of its tax base by bringing the implementation date for the nondeductibility provision and the phasing in of earned depletion forward from 1977 to 1974. In effect, the federal government, having made fiscal concessions to the provinces, felt compelled to withdraw some of them when the provinces were not content with the concessions and attempted to further increase their share by increases in direct provincial taxes and royalties.

3. Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', p. 130; Wojciechowski, *Federal Mineral Policies 1945 to 1975*, p. 38-39.

The mining industry fought an initially reasonably successful rearguard action to modify the Carter Commission and Benson White Paper proposals. It was successful in this partly because of the strong lobbying campaign it waged⁴; this type of response by the industry to perceived threats to its interests was not new, as has been shown above in dealing with Inco's response to public pressure in the 1920s. What was new, and probably decisive, was the strong provincial lobby which put its weight behind the idea of tax reform, but in a modified and vitiated form.⁵

The commodities boom of 1972-74, however, upset the temporary alliance of industry and provinces against the federal government. The provincial race to increase their share of the 'windfall' profits had, when combined with the new federal taxation regime, a drastic effect on mining taxation. In the period 1969-75 the effective tax rate on manufacturing declined by 16 percent (from 38.6 percent to 32.5 percent) while that for mining increased by 101 percent (from 20.7 percent to a peak rate of 41.8 percent in 1975).⁶

Some of the measures taken by the provincial governments were far more drastic than the federal measures (or even federal proposals) had been. This was particularly so when the measures are seen incrementally, as being added on to an already heavier federal burden. Before 1973, according to Stevenson, the provincial governments normally paid out more to the mining industry in services rendered than they received from resource taxes and royalties. After 1973, the year of the oil crisis, eight of the provinces increased resource taxation and rents. Most of the changes did not originate in the provincial mines departments, but from the provincial Premiers' offices or treasury departments.⁷

From the peak in 1975 the taxation burden on the mining industry relative to other sectors declined substantially. In the 1976 federal budget, the 15-percent abatement for mining income was replaced by a 25-percent 'resource allowance', allowing companies to write down their taxable income by 25 percent after deducting capital cost allowance. Over the period 1972-80, the weighted average taxation burden on mining appears, from Statistics Canada figures (see table 7), to be lower than on other sectors, probably in recognition of its greater volatility and risk exposure.

While the actual provincial tax changes received an angry reception from the industry, some of the provincial mineral policy proposals positively frightened and disrupted it. The most famous, or notorious, of

4. Bucovetsky, 'The Mining Industry and the Great Tax Reform Debate', p. 107.

5. *Ibid.*, pp. 100-101.

6. Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', p. 141.

7. Stevenson, 'The Process of Making Mineral Resource Policy', pp. 177-178. Some of the increases were designed more to encourage local processing and create jobs than to raise revenue, according to Stevenson, p. 179.

Table 7

EFFECTIVE TAX RATES^a: METAL MINING, MANUFACTURING AND TOTAL NON-FINANCIAL, 1972-80

Year	Metal Mining		Manufacturing	Total Non-Financial
	Without Provincial Mining Taxes	With Provincial Mining Taxes		
1972	16.5	26.9	39.4	38.0
1973	12.0	21.6	33.4	33.0
1974	21.5	35.6	33.0	35.3
1975	23.1	40.0	36.2	38.7
1976	17.2	31.0	36.0	37.1
1977	13.1	23.5	32.0	34.3
1978	15.5	23.5	29.2	30.7
1979	15.8	21.3	27.8	27.8
1980	20.6	27.6	31.6	30.3
Weighted average 1972-80 ^b	17.8	26.9	32.2	32.3

Source: Albert Dorland, 'A Statistical Perspective', in David Yudelman (editor), *Financing Canadian Mining in the 1980s: Strategies for Action* (Kingston: Centre for Resource Studies, 1984) p. 31.

^a Calculated as federal and provincial income taxes and provincial mining taxes, divided by industry net book profits before taxes adjusted to exclude Canadian dividends and capital gains.

^b These average figures mask considerable differences between provinces, with the provincial mining taxes displaying a wide range of different rates.

these was Eric Kierans' *Report on Natural Resources Policy in Manitoba*.⁸ The Kierans Report was written for and published by the government of Manitoba in the spring of 1973, with virtually no participation by its Department of Mines, Resources and Environmental Management.⁹ To this day, mining industry audiences react emotionally to its mention.

The report focused on the analysis of mining profits and the potential benefits to Manitoba from establishing Crown corporations. It recommended that the Manitoba government make the public sector responsible for all future mining development, to ensure that the value of its depleted resources remains in Manitoba. To back up this conclusion, the report argued that:

8. Published in Winnipeg, 1973.

9. Stevenson, 'The Process of Making Mineral Resource Policy', p. 176.

- metal mining has little risk, but generates profits ('economic rents') significantly higher than a required normal return on capital;
- the real gains from mining go to large corporations;
- government Crown corporations for mining would be feasible and profitable;
- smelting and refining are relatively unprofitable compared to mining and milling;
- multiplier benefits of mining would occur equally under Crown corporations.

Crown corporations constitute the most direct intervention possible by a government in the private sector, but can also be seen as just another method by which government 'may obtain direct fiscal benefit from resource extraction'.¹⁰ (The other two are: taxation of the benefits of extraction; and exacting a rent or royalty for allowing the private sector to extract a public resource.) They may on the other hand be a weapon against other branches of government. Saskatchewan created a Crown corporation for potash in 1975, 'partly out of ideology; partly out of a bitter federal/provincial battle over resources; and partly as a pragmatic rebuttal to a mounting set of complex legal, technical and financial problems'.¹¹ Manitoba did not follow Kierans' recommendations to do the same thing, but it did increase its mining tax rate and supplement it with a system of royalties.¹²

The Kierans Report created much controversy and some bitter criticism.¹³ It was not implemented, but it left a lasting impression in that it had voiced the previously unthinkable. In some ways it made the industry more placatory and prepared to envision changes, provided they were less radical than Kierans had suggested.

The industry, naturally, put more of the blame for the substantial tax increases of the mid-1970s on the provincial governments than on the

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10. John D. Whyte, 'The Constitution and Natural Resource Revenues' Institute of Intergovernmental Relations Discussion Paper No. 14, (Kingston: Queen's University, 1982) p.1. Crown corporations are generally instruments of mineral policy rather than a distinct end of policy itself.
 11. Roy Romanow, 'The justification and evolution of Crown resource corporations in Saskatchewan', p. 58.
 12. Stevenson, 'The Process of Making Mineral Resource Policy', p. 178; James T. Cawley, 'The Metallic Minerals Royalty System of Manitoba', in *Rate of Return Taxation of Minerals*, Proceedings No. 1, (Kingston: Centre for Resource Studies, 1978), pp. 71-81.
 13. Hedlin Menzies and Associates, *An Analysis of the Kierans Report on Mining Policy*, Prepared for the Mining Association of Manitoba, 1973; G. Anders, 'Rent, Communal Property and Economic Nationalism', Toronto, Ministry of Natural Resources, no date; Charles H. Pye, *Profitability in the Canadian Mineral Industry* (Kingston: Centre for Resource Studies, 1981), pp. 43-44.

federal government; but it continued to press for lower federal tax rates as well.¹⁴ Consultation (as opposed to lobbying) between the industry and the federal government in the early 1970s, before the 1973-74 tax changes, was largely limited to the private-sector National Advisory Council on the Mining Industry (NACOMI), established around 1970, which was convened whenever the EMR Minister sought its advice. This contact was not regular, however, nor was it formalized at the top levels of policy formulation. But regular consultation between the mining companies and the service wings of the mines departments continued, within both the federal and provincial governments. In fact, relations at this level were so close up to the early 1970s that it has been suggested that the mining departments, in relation to other government departments, lost credibility because of their over-close ties with the industry.¹⁵

Partly for this reason, and paradoxically, they were progressively shut out of the policy-making process by provincial treasury, finance, environment and other departments. In the federal government, the taxation changes of the early 1970s were apparently introduced without consulting EMR. Only subsequently did EMR create a Financial and Corporate Analysis Division in the Mineral Development sector, partly to ensure some input into future policy decisions on taxation.¹⁶ However, many important policy decisions, particularly in the fiscal area, had already been taken without full consultation and consideration of their consequences for the producers.

In the mid-1970s the relations between federal and provincial governments, and of the mining industry with both levels of government, reached their nadir, just as effective tax rates reached their peaks (see table 7). A general recognition developed that the governments had to compromise on revenue shares to avoid irreparable harm to the industry, and 1976 and 1977 saw dramatic rollbacks. These years also saw a move back to consultation between the three parties.

Talk of the need for consultation between government and business in general coincidentally increased over the same period, particularly because of the need to mobilize consensus on the issue of wage and price controls.¹⁷ In the spring of 1977, 5000 businessmen were asked by the federal Department of Industry, Trade and Commerce (ITC) for their opinions on government policies. They responded with a barrage of complaints about excessive regulation and taxation, as well as about the effect on mobility in labour

14. Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', p. 140.

15. Stevenson, 'The Process of Making Mineral Resource Policy', pp. 174-5, 192.

16. *Ibid.*, p. 185.

17. Michael J. Prince and G. Bruce Doern, *Federal Policy and the Role of Public Enterprise in the Mining Sector*, (Kingston: Centre for Resource Studies, 1984) p. 18.

markets of unemployment insurance payments to individuals.¹⁸ This resulted, in February 1978, in the creation by ITC of 23 sector task forces, in which the federal government met representatives of industry, labour and the provinces to develop new industrial policy proposals.

The nonferrous metals sector was among the 23, and was composed of 15 industry representatives, one labour representative, one academic, and seven provincial representatives from five provinces. Observers were sent by the federal government (from seven different departments) and the Mining Association of Canada. The nonferrous metals sector task force produced a report in June 1978 which made recommendations on the investment climate, resource processing, transportation and trade, environment, research and development, and labour.¹⁹

The task force put the industry point of view cogently, with a number of specific recommendations for policy changes, particularly in the area of investment climate. It did not, however, make a concerted effort to deal with the issue of the direction of overall mineral policy. It did publish, as an appendix, a Department of Industry, Trade and Commerce profile on the Canadian nonferrous metals industry which raised the issue of mineral policy overall, but it made no attempt to take the matter any further. This pattern of responding to individual government initiatives on mineral policy, rather than attempting to participate actively in setting the agenda for of policy strategy, is typical of the Canadian mining industry and, to a lesser extent, the private sector in general. The task force missed an important opportunity by allowing government to define the mineral policy issues being discussed.

The task force was also preoccupied with the growing controversy over the issue of tax jurisdiction between the federal and provincial governments. This preoccupation was justified, as it is difficult to envisage a coherent federal-provincial mineral policy emerging while the issue of control of its major lever – tax policy – was still being hotly disputed. Nevertheless, the tax jurisdiction debate had the effect of further sidetracking momentum towards a national mineral policy in the early 1970s.²⁰

18. Douglas Brown and Julia Eastman with Ian Robinson, *The Limits of Consultation: A Debate Among Ottawa, the Provinces and the Private Sector on an Industrial Strategy*, Ottawa, 1981, p. 117 et seq.; Richard D. French, *How Ottawa Decides*, pp. 122-123.

19. Alfred Powis, chairman, *The Canadian Non-Ferrous Metals Industry* (Ottawa: ITC, 1978).

20. It should perhaps be emphasized here that a large number of Canadian policy analysts, perhaps the majority, would question whether any coherent Canadian 'national mineral policy' is possible, given the divided jurisdiction of federal and provincial governments. Some would go even further, and deny even the desirability of such a policy, making a virtue out of what they perceive to be a necessity. It must be conceded that the obstacles to formulating a mineral policy are legion: they have been outlined in some detail elsewhere (Yudelma, 'Canadian Mineral Policy Formulation...', pp. 61-63). It is,

Virtually at the same time that the nonferrous metals task force was meeting, the Federal-Provincial Resource Taxation Review, dealing with similar issues, was taking place.²¹ On 20 January 1978 the federal and provincial Mines Ministers met, for the first time since 1974. They agreed on the need for cooperative action by both levels of government to enhance the contribution of the resource industry to Canada's economy, while disagreeing on their respective resource tax jurisdictions. The following month, the First Ministers conference announced a tax review by federal and provincial officials for finance and resource ministers. The review was completed and presented as a discussion paper at the First Ministers' Conference on the Economy, November 27-29, 1978.

The review did not confine itself to narrowly defined taxation issues, and constitutes an impressive recognition, at the top levels of government, of the industry's problems. The officials made it clear to their ministers that only a healthy industry would be a reliable source of revenue. They had no mandate to recommend specific changes in tax systems, but they laid out an impressive list of priorities for mineral taxation policy. Unlike the dominant government view of the previous decade, the report does not see mining as largely a milch cow, a potential source of revenue to finance other sectors of the economy. The priorities are particularly striking when compared to the actual tax changes of the preceding six years.

1. The need for stability and certainty in the tax system:

- greater certainty in resource taxation policies, the elimination of federal-provincial competition catching the industry in the middle, and more consultation between governments and industries on tax and other matters.

moreover, difficult to justify by detailed analysis something that seems almost tautological or self-evident to me: that policies in the mineral areas should not, as far as possible, contradict each other, or policies in other areas; moreover, that they should, as far as possible, be part of a strategy which moves in a definite direction, however slowly and with whatever hesitations; finally, that they should not be seen in isolation, but self-consciously formulated with an awareness of their effect on, and their consistency with, other policies.

For some perceptive suggestions about the Canadian tendency to bureaucratize policy formulation and respond to issues 'by the conjoining of liberal pragmatism and administrative expediency', see V. Seymour Wilson, 'Mandarins and kibitzers: men in and around the trenches of political power in Ottawa', *Canadian Public Administration*, vol. 26, no. 3, 1983, p. 460. Wilson notes that the Canadian recognition of 'pervasive continentalist forces' and the extension of this into domestic administration, 'makes us peculiarly incapable of determining our own fate'.

21. Thus the two major groupings in mineral policy formulation, industry-government and federal-provincial, were simultaneously being subjected to comprehensive review. See Douglas Brown *et al.*, *The Limits of Consultation*, pp. 9, 10, 12.

2. Recognition in the tax system of the cyclical nature of the mining industry:
 - adequate profits to be retained in high profit years to offset lean years, excessive taxation of cyclical type profits to be eliminated, and progressive tax regimes to be reconsidered.
3. The need for an adequate level of capital investment, growth and development:
 - tax to take into account the need for a level of profits which ensures investment and reinvestment, special risks and circumstances of the sector to be taken into account, taxes to be minimal until capital invested has been recovered.
4. An acceptable federal-provincial division of revenues:
 - competitive taxation to be avoided, respective federal and provincial rights recognized, responsibility to both federal and provincial electorates for taxes levied.
5. Greater harmony and less complexity in tax systems:
 - simplification where possible and more uniformity between governments and systems.
6. Encouragement of further processing in Canada:
 - the avoidance of inter-provincial rivalries and the assurance that processing allowances do not increase mining tax liability.
7. Consistency of tax system with national priorities:
 - federal and provincial governments to ensure that tax problems do not delay 'national interest' projects.

The Federal-Provincial Resource Taxation Review was primarily concerned with federal-provincial relations and their effect on the taxation of metals and minerals; but the report also seems to indicate at the same time that a new concern was emerging about the future health of mining, and the need for governments to foster it. An unwritten understanding was reached that neither level of government would move into mineral tax space vacated by the other, freeing each to provide incentives to the industry. In a sense, it was a harbinger of the resource-led economic development and regional policy espoused by the federal government from November 1981.

The Taxation Review was officially forwarded to Ministers on 1 November 1978. Two weeks later the federal Minister of Finance, Jean Chrétien, assured the mining industry in his Budget Speech that the federal government intended to continue to cooperate with the provinces on taxation and

to ensure that the industry benefited as a consequence. He made a number of fairly important taxation concessions to the industry at the same time, including a proposal to increase the write-off for development expenditures on mining from 30 percent to 100 percent, and a significant increase in the items which could be deducted under the 'earned depletion' and development provisions. Early the following year, the Federal-Provincial Working Group on the Mineral Industry was set up to continue to work towards federal-provincial coordination in mineral policy.²²

Chrétien also assured the provinces that the federal government would not step into any tax space that might be vacated by any province. Some of the provinces responded to this and to other developments by significant rollbacks in taxation, largely through the removal or cutting of graduated or incremental taxes on mining. But the industry had by 1979 (and in spite of the growing concern of governments for the health of the mining industry) only regained some of the ground it has lost in the mid-1970s.²³

The Policy Implications

Debates about policy formulation do not occur in a vacuum. Indeed, it is common for policy to be worked out through specific responses to concrete situations. When many such responses exhibit a coherent and internally consistent pattern – almost always the result of broad common goals, however inarticulate – one is able to identify a policy. This policy exists irrespective of whether those involved in the concrete situations had been consciously aware of the overall pattern (see chapter 1 above). The point is particularly relevant to the mineral policy of growth consistently followed by Canada between 1945 and 1970 even though the policy was not commonly or coherently articulated.

In this respect, the quest for an explicit mineral policy by the federal and provincial governments in the early 1970s was unusual. Blueprints and five-year plans had not been commonly accepted in the Western liberal democracies as preferred methods of making mineral or other policy. In the late 1960s and early 1970s, however, planning became fashionable and, with it, projects to arrive at 'Policies'. This did not merely reflect a change in fashion in government, but was also indicative of a situation where the old policy was no longer fully adequate.

Why was there a need to change the mineral policy of growth? Not, obviously, because Canadians generally wanted to slow or reverse that growth. Environmentalists, for example, wanted only to control the growth and clean it up. Even conservationists merely wanted to synchronize growth

22. Dept. of Energy, Mines and Resources, *Annual Report 1979-80*; Prince and Doern, *Federal Policy and the Role of Enterprise in the Mining Sector*, p. 22.

23. Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', pp. 181-184, 192.

with long-term proven reserves. The real issue appears to have been who was to share the fruits of growth and in what measure, rather than whether growth was desirable.

The federal and provincial governments decided in the early 1970s that the central goal of their new mineral policy was to 'obtain optimum benefit for Canada from present and future use of minerals'. This was commonly and justifiably seen as merely a bland 'motherhood' statement, but it concealed real struggles about power and wealth, and a real move toward a different sort of mineral policy. To decode the new policy, one had to ask what 'optimum' (as opposed to 'maximum') meant. What did 'Canada' (as opposed to Canadian citizens, producers, consumers, miners, governments) mean?

On the most obvious level, the goal of obtaining maximum benefit for Canada appeared to refer to the enduring theme of nationalism in mineral policy, which had ebbed and flowed since the late nineteenth century. By the 1960s the growth of large multinational firms in the mining industry, among others, was seen as a 'great challenge to government at all levels'.²⁴ It was strongly argued by governments that they had to develop the capability, both in data gathering and analysis, as well as in policy formulation, to handle this challenge.

Confronting foreign multinationals is usually a politically easy and popular policy to follow, especially so long as the confrontation is largely limited to words and does not lead to large-scale divestment and unemployment. In fact, while the multinationals were subjected to insults for the benefit of the Canadian electorate, the actual effect of mineral policy on them as multinationals in the 1970s amounted to mere pinpricks. In 1974, Canada established a system of foreign direct investment regulation through the Foreign Investment Review Act and Foreign Investment Review Agency. Until 1980 it was seen as only a minor irritant and condoned explicitly on occasion by the U.S. government.²⁵

Even more important, the actual effect of important changes such as those in the tax system had the effect of entrenching the large integrated mining companies (in which category most of the foreign companies are to be found) at the expense of the smaller companies (which are overwhelmingly Canadian).²⁶ The tax reform legislation that finally emerged in 1971 was very different from that envisaged by the Carter Report and the Benson White Paper, and was influenced by the need to compete with the U.S. industry on equal mineral policy terms. The end product was:

24. EMR, 'Notes on Mineral Management...', p. 23.

25. David L. Anderson, *Foreign Investment Control in the Canadian Mineral Sector: Lessons from the Australian Experience*, p. 1.

26. Caragata, 'Non-Fuel Minerals and Canadian Foreign Policy', p. 132.

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a reformed tax system which looks in some key aspects more like the present American system than the Royal Commission blueprint.²⁷

The abandoned three-year tax exemption was lamented by all in the industry, but the provision had been relatively more favourable to the extraction of small and medium sized orebodies, because of their shorter life (though preproduction write-offs tended to balance this out).

The new system was designed to provide for full capital cost recovery prior to the payment of profit-based tax, rather than the exemption of profits *per se* from tax. This had the effect of favouring those firms most able to use the available tax shelters, namely the large integrated mines which have other sources of income against which the tax write-offs can be applied.

Aside from the central mineral policy goal of obtaining optimum benefit for Canada from its minerals, 12 other objectives were put forward in 1973 (see above p.52). Of these, seven are categorized as economic growth and development objectives. The taxation and revenue policy changes of the 1970s, however, do not relate directly to any of these seven objectives, let alone the remaining five. Yet these taxation changes were the major changes in mineral policy in the 1970s. How does one explain the discrepancy?

The first and obvious explanation was that neither EMR nor the provinces were, or are, in a position to make mineral policy unilaterally. Since EMR could not make tax policy, it concentrated on areas where it could make policy. This was fair enough, although to call the result a national mineral policy – whether a mere delineation or not – is simply misleading.

More important, however, was the fact that the published mineral policy suggestions were attempting to be inoffensive to both federal and provincial governments; thus they had to avoid the real issues of mineral policy in the early 1970s because the latter were highly contentious and required a debate and compromise on basic principles. There were at least two major real issues for mineral policy:

- the federal-provincial jurisdictional dispute, particularly as it affected taxation;
- the continuing struggle over what share of mining's revenues should go to the federal and provincial governments, what share to the industry, and what share to other interests.

In both cases, the real policy objectives of federal and provincial governments were to optimize their own benefits from the present and future use of minerals by a policy of redistribution. This is not to argue that the policies aimed self-consciously or cynically at pure self-aggrandizement, and were indifferent to encouraging growth, (though it must be pointed out that they were self-serving). Each level of government no doubt

27. Bucovetsky, 'The Mining Industry and the Great Tax Reform Debate', p. 102.

believed that its objectives would optimize the situation for Canada, or Ontarians, or citizens, or the poor, or unemployed, or any number of groups that make up 'Canada'.

The jurisdictional dispute appears to have emerged because, with the expansion of governments, revenue sources became progressively less adequate to meet expanding demands made on government, and government's revenue thirst became correspondingly more insatiable. The constitutional potential for jurisdictional dispute had been present from Confederation onwards, but it finally emerged as a live issue in the late 1960s. The federal Privy Council Office began to write to the federal line departments asking them, as they did EMR, for expressions of opinions as to 'what level of government, acting separately or jointly with others, is best suited to respond to the problems and trends identified...' and explicitly mentioned the need to devise 'possible constitutional options'.²⁸

EMR responded, not surprisingly, by suggesting that the federal government assume the leadership in formulating goals for the industry:

Effective management requires considerable research and forecasting to provide a full understanding of, and to predict, the need for and the consequences of government action. In many cases the staff and resources of provincial mining departments are not adequate to undertake such research; even if the provinces were able...there would very likely be considerable duplication of effort between provinces. For these reasons, the federal government, in co-operation with the provinces, is perhaps the most appropriate organization to undertake research and provide advice. This is in fact already occurring to an increasing degree.²⁹

Ironically, as we have seen above, some provincial governments used federal tutelage to undercut the federal dominance of mineral policy. Even those with a long indigenous history of provincial intervention (such as Saskatchewan) tended, it has been argued, to focus on 'passive rentier policies' in the 1940s and 1950s, and only moved to 'entrepreneurial development strategies in the 1970s'.³⁰ EMR, though it told the Privy Council what it wanted in general to hear, did not come up with any firm 'constitutional options'. In background studies it balanced the rights and obligations of each level of government by looking first at the then existing constitutional position. The important jurisdiction accorded to the provinces over mineral rights on their provincial Crown lands by Section 109 of the BNA Act was not disputed; but it was pointed out that under sections 91

28. EMR, 'Notes on Mineral Management...', p. 1.

29. *Ibid.* p. 2.

30. John Richards and Larry Pratt, *Prairie Capitalism: Power and Influence in the New West*, (Toronto: McClelland and Stewart, 1979), p. 11.

and 92 'the federal government has important powers that might take precedence over those of the provinces'.³¹ These federal powers include jurisdiction:

- over interprovincial 'works and undertakings', such as pipelines, railways and waterways (e.g. the National Energy Board);
- over exports and external relations, affecting trade, commodity agreements, multinational corporations and policies of foreign governments and investors (e.g. export licensing, Foreign Investment Review Agency);
- over 'national interest' issues such as uranium and gold mining subsidies and energy policy, as well as further processing (about which the provinces have also legislated);
- over statistics, weights and measures, with consequent extensive research and publications leverage;
- over 'spending power', which can significantly influence mineral development (e.g. General Development Agreements);
- over, most important of all, federal taxation: 'a powerful tool that has been used to influence mineral development... Provincial tax leverage is smaller but nevertheless is commonly used to influence mineral development. The current [1972] tax proposals will substantially shift mineral management to the provinces'.³²

Overall, the EMR report argues that federal jurisdiction in the mining industry, Section 109 notwithstanding 'is such that its influence on the nature, scope, location, and timing of mineral development may at least equal that of the provincial governments'.³³ The report accepts that constitutional change might be helpful, but warns against compartmentalizing federal and provincial responsibilities and jurisdiction in the mineral field.

The federal government took this EMR advice for minerals and was largely content in the 1970s to modify the constitutional relationship through reinterpretation of the constitution via the courts. The controversial majority decision of the Supreme Court of Canada in the *CIGOL* case, for example, struck down Saskatchewan's 'mineral income tax' on oil and gas, mainly on the grounds that the tax was considered indirect. These reinterpretations have not been definitive and further reinterpretation might follow in the 1980s including:

31. EMR, 'Progress Report on National Mineral Policy Objectives', appendix F, p. 2. See also appendix IV, below, 'Mining and the Constitution, 1867-1982'.

32. *Ibid.* pp. 2-3.

33. *Ibid.*, p. 4.

- the implications of the resource amendment, Section 92A, of the Constitution Act, 1982;
- decisions on 'Section 125 controversies' over whether provincial Crown corporations are subject to federal revenue taxes;
- judgments on the attempt of some provinces to regulate the structure and growth of industries which are largely interprovincial;
- questioning of the new provincial taxing power introduced with repatriation of the constitution in 1982.³⁴

The question of what redistribution actually took place as a result of the taxation changes of the 1970s is of interest but, from the point of view of mineral policy, is less important than the fact that mineral policy itself became redistributive. Clearly, the mining industry lost revenue share in the new distribution. The federal and provincial governments both benefited fairly directly, as is illustrated in table 7 above and in table 8.

What exactly the federal and provincial governments did ultimately with the revenue (i.e. to whom was it redistributed?) remains a moot point; but there is some evidence of a shift by both levels of government to favouring manufacturing and the processing of metals over mining in the mid-1970s, when mining taxes were said by some in the industry to be 28.6 per cent higher than taxes on manufacturing.³⁵

The federal-provincial conflict over mining taxation was eventually eased on the initiative of the mining industry, when its spokesmen persuaded the two levels of government to get to the table at the intergovernmental resource Ministers' meeting on 20 January 1978. This was in turn followed by the federal-provincial taxation review and Jean Chrétien's assurances described above.

The great 1970s mining revenue grab provides a striking illustration of the tension between the specific, contingent needs of the moment and the longer-term principles that underlie mineral policy. If policy fails to take into account the concrete interests vying for scarce resources, it becomes either an irrelevant exercise in abstraction or dangerously divorced from reality. On the other hand, if it merely accommodates itself to the shifting tides of everyday events, it becomes a mere summary of these events. First the federal government, then its provincial counterparts, decided in the

34. John D. Whyte, *The Constitution and Natural Resource Revenues*, e.g. pp. 2, 39; William D. McAll, 'Mineral taxation in Saskatchewan under the new Constitution', in Richard Bartlett (editor), *Mining Law in Canada*, p. 219-231; *Canadian Industrial Gas & Oil Ltd. vs Government of Saskatchewan*, [1978], 2 S.C.R. 545, 80 D.L.R. (3d) 449; Richards and Pratt, *Prairie Capitalism*, pp. 287-294. For an examination of some of the implications of constitutional change for resource industries, see Robert Cairns, Marsha Chandler and William Moull, 'The political economy of 92A', paper delivered at Osgoode Hall, York University, March 1985.

35. EMR, 'Notes on Mineral Management...', p. 1.

Table 8

TAXES AND ROYALTIES ON MINING: 1969-75^a
(percentage)

Year	Federal	Provincial		Total
	Income Tax	Income Tax	Mining Taxes and Royalties	
1969	10.0	2.7	7.7	20.7
1970	11.4	3.1	7.0	21.7
1971	8.4	2.5	7.5	18.5
1972	11.5	3.5	10.2	25.4
1973	9.4	2.6	7.4	19.5
1974	14.8	5.1	16.4	36.7
1975	14.4	5.5	21.1	41.8

Source: Statistics Canada, Department of Finance, cited in E.P. Neufeld *et al.*, 'Federal-Provincial Resource Taxation Review', Doc. No. 800-9.018 (Ottawa, 1978), p. 31.

^a Unlike table 7, mining here refers to both metal and nonmetal mines.

early 1970s to redistribute mining revenue in a fundamental way. But, partly through conflict between the different levels of government, partly through an inadequate grasp of what was feasible in the concrete situation of the time, the governments overreached themselves. To ensure the survival of threatened sections of the industry, they had to make a partial, but significant, retreat. This retreat, however, was not accompanied by the development of any new strategy, and led to a policy responding in an *ad hoc* way as events unfolded.

The federal and provincial governments and the mining industry drifted into a morass by the mid-1970s which could have been avoided, had there been a coherent mineral policy to draw on. The collapse of the commodity boom would have created problems anyhow, but the fiasco created by the many conflicting mineral and tax policies of the mid-1970s greatly exacerbated matters. Only the exhaustion and desperation of mutual failure later brought the governments and industry together again to compromise on their incompatible goals.

The potentially positive aspects of the new situation, however, only emerged slowly. The 1970-78 dominance of redistributive issues was gradually supplanted in 1978 by a concern for the health of the industry which generated the revenue and employment in the first place. Governments and the industry became aware again of their positive mutual interests. There

was a new determination to lay down a stable taxation and general mineral policy regime in which the industry might re-establish its strength. This did not mean there was to be a return to the old mineral policy of growth: a policy favouring resource-led economic growth and emphasizing regional development now began to emerge, borrowing freely from the mineral policies of growth and redistribution, but attempting to avoid old mistakes and cater to new realities. Further progress, however, was to be halting and not without setbacks.

6. Economic Development Policy and Mineral Policy 1978-82

Since 1978, Canadian governments have ostensibly returned to the traditional policy of resource-led economic development. But, although there are definite similarities between the expressed new policy and the traditional policy of growth (see chapter 3), there are also important differences, particularly in the explicit links being suggested between resources, industrial strategy, and regional policy. Mineral policy over this period is dominated by resource policy, industrial strategy and regional policy as a whole, and it will be analyzed in this broader context here. This is not to argue that one can draw unqualified analogies between, for example, energy policy and mineral policy. Many of the Canadian energy policy changes in the late 1970s were the direct result of purely external influences such as OPEC's 1979-80 price increases. Minerals were also an area, as we have seen, of diminishing relative importance to the Canadian economy, and one in which governments agreed to proceed with caution after 1978.

On the other hand, it would be myopic to suggest that the developments in resource policy over the period 1978-82, particularly those in the area of energy policy, had no influence on mineral policy. The National Energy Program (NEP) was obviously unsuitable as a blueprint for nonfuel minerals, in spite of the rumoured support at the time from a few senior bureaucrats for its extension to mining. But, however different in form and degree, it was a policy of redistribution similar in intent to the mineral policy of redistribution which had been buried in 1978.

The failure in the case of minerals resulted in an uneasy and partial return to the *status quo* without, as we have seen, the emergence of any alternative strategy or mineral policy. The NEP was a failure on a grand scale – from the point of view of the Canadian economy overall – and could not be relegated to the back burner, as mineral policy had been. Canadian governments were jolted into the realization that a new resource policy had to be formulated for Canada. Neither the traditional policy of growth so successfully followed after World War II in the case of mining, nor the fashionable redistribution policies of the 1960s and 1970s, appeared to be adequate for the 1980s and beyond.

By the end of the period 1978-82, after much hesitation and many false starts, an embryonic new resource policy began to emerge. The new resource policy was one to which the mining sector made only a limited contribution, but which presented challenges and opportunities to mineral policy which, as we shall see, have yet to be fully exploited.

In the 1950s and 1960s, the importance of encouraging the resource industries to fulfil their role as engines of economic development was widely accepted. In the late 1960s and 1970s, however, the resource industries came increasingly under challenge.¹ Instead of being the recipients of government encouragement, it was often argued, they were now 'mature industries' and should finance the development of other industries, particularly manufacturing. By 1978, the pendulum had begun to swing again and the mining industry in particular was being viewed as vulnerable, the victim of policy failures and neglect, and in need of special consideration by governments.

A primary concern of governments remained the necessity of encouraging Canadian industry in general to export more. There are two traditional policy responses to this dilemma: breaking down the artificial protection of tariff and nontariff barriers and following one's comparative advantages; or enforcing a policy of further processing of natural resources before export. These options for mineral policy were dealt with in chapter 2, and have been succinctly detailed by Glen Williams in the broader context of Canadian economic development policy overall:

On the level of policy theory, two opposing positions have traditionally been available to policy-makers who wished to address the failure of Canadian industry to export. One approach has minimized the predicament, proposing that we break down the tariff barriers which shelter our weak inefficient manufacturers. Canada could then concentrate on exporting the resource products in which we have a comparative advantage. In time, the discipline of the market would leave us with a smaller, but healthier and more internationally competitive, industrial sector.

The contrary approach argues that foreign investment has prevented us growing beyond a 'hewers of wood and drawers of water' stage by transforming our abundant raw materials into fully manufactured products for sale in world markets. An industrial strategy, organized by the state with the purpose of re-orienting and re-constructing the branch plant economy, is mandatory if the mistakes of the past are to be corrected.²

Williams' is a fair summary, except for the last sentence: there is nothing 'traditional' about the industrial strategy of direct government intervention. The traditional approach was rather for governments to protect and encourage manufacturing and further processing indirectly by tariff and other barriers.

1. See previous chapter, especially the section on 'The Fight for Revenue'.

2. Glen Williams, 'Trade and Promotion and Canada's Industrial Dilemma: The Demise of the Department of Industry, Trade and Commerce', in G. Bruce Doern (editor), *How Ottawa Spends Your Tax Dollars 1982: National Policy and Economic Development*, Toronto, 1982, pp. 122-123, 117-119.

What began to emerge after 1978, in fact, was a new blend of what Williams dubs the traditional options. Policies began to focus again on generating economic growth by concentrating on Canada's supposed comparative advantages in resources; but these policies differed from the traditional policy of growth in important ways. Instead of generating economic development merely by providing the conditions for resource-led growth, federal and provincial governments leaned increasingly toward direct intervention and forced growth of the resource industries. They also increasingly rejected the trickle-down theory of the redistribution of the wealth generated by resources (according to which profitable companies create new or better-paid jobs which in turn generate higher government revenues and increased capacity to undertake social programs) in favour of governments taking over the redistributive role themselves. This subtle, but important, shift of emphasis is well illustrated by the two alternatives sketched in a 1980 EMR *Discussion Paper on Coal*. Though the document was specific to coal policy, one should note its preoccupation with government intervention in a resource industry to achieve macro-economic and regional policy goals. This focus is of broad applicability to perceived policy options for other resource industries as well:

Two broad approaches are possible. Under the first, policies could be chosen which would ensure that the Canadian coal system can meet foreign and domestic demands **as they arise** by addressing and alleviating non-economic constraints on the production, transportation and end-use of coal. This approach might be thought of as letting coal follow the system. On the other hand there are circumstances in Canada where coal can be seen to drive the system. That is to say developing the coal industry is seen as a means of increasing its contribution to the Canadian economy on a regional basis. In this latter sense opportunities associated with Canada's coal resources are exploited in anticipation of foreign and domestic demand ...³

Thus, although the new approach recognized the importance of the resource industries to the economy overall, it did not propose to follow the traditional method of merely providing the conditions for their growth. Rather it proposed to use the resource industries as a lever for further state control of industrial strategy overall, and for sectoral redistribution at the discretion of the federal government.

The push for greater government intervention in the late 1970s and early 1980s was largely confined to the energy minerals, oil, gas and coal. With the price of oil still rising steeply and demand seemingly inexhaustible, this was where the real revenue potential lay. Mining, having undergone a debilitating three-cornered federal-provincial-private sector struggle over

3. Energy, Mines and Resources Canada, *Discussion Paper on Coal*, report EP 80-1E, p. 43.

taxation from 1968 to 1978, was not a high priority area for accelerated government intervention. Governments no longer perceived it as the producer of significant, and untaxed, economic rents. In the area of oil and gas, by contrast, drastic intervention was being actively planned by the federal government.

From 1978 there was an infusion of new bureaucrats into the senior levels of Energy, Mines and Resources. In April 1978, Marshall Cohen arrived from the Department of Finance, as the new Deputy Minister. This appointment, according to one journalist, marked 'the second coming of the Department of Energy, Mines and Resources' which 'signified that the department's policy side was once again being beefed up'.⁴ Cohen was followed by Edmund Clark, also from Finance. When Cohen left EMR in 1979 (to return later) he was replaced by Ian Stewart. Other senior recruits from Finance were George Tough and Len Good. The group apparently began laying the intellectual groundwork for a highly interventionist energy policy at this time. For those making energy policy, EMR became 'the place to be in the great Ottawa bureaucratic structure, the place where key policy was being made'.⁵ The new group all recognized the importance of resources in the Canadian economy, as traditional Canadian industrial policy had; but it drew very different conclusions about the desirable role of government in dealing with the resource industries, particularly the energy fuels.

Industrial strategy

In the 1980 election, the Liberals capitalized on the prevailing public concern about foreign ownership and promised an industrial strategy for Canada, implying a tough line on foreign investment. This helped the party to win a number of Ontario seats.⁶ Herb Gray, who had overseen the electorally-successful industrial strategy platform, was made the Minister of Industry, Trade and Commerce.⁷ Gray quickly gave notice that a more active policy of government intervention was imminent, and on 3 July 1980 presented a 71-page document to the federal Cabinet, entitled *Framework for implementing the Government's new industry development policy during the next four years, and proposals for immediate action*.

The Gray document is highly interventionist. It accepts the importance of the resource industries, but primarily as a source of funds for the development of other sectors of the economy. It calls for a new approach to

4. Peter Foster, *The Sorcerer's Apprentices: Canada's Super-Bureaucrats and the Energy Mess*, Toronto, 1982, p. 74.

5. *Ibid.*, p. 76.

6. Glen Williams, 'Trade and Promotion and Canada's Industrial Dilemma', p. 125.

7. *Ibid.*

industrial development which would reap full benefit from Canada's relative abundance of energy and natural resources (p.1) It advocates the encouragement of industrial development (especially manufacturing) by the use of the federal government's regulatory power to use massive resource projects to achieve this development (p.2).

The document clearly preshadowed the hostility to foreign investment and multinational corporations which was to be such a prominent feature of the National Energy Program, published in November of 1980. It recommended a policy of urgent government encouragement of high technology in communications, transportation, resource exploitation, and petrochemicals, and suggested an activist role for the government in supporting selected firms which find it hard to compete in world markets (p.69). The Gray document does not propose a protectionist policy, as traditional pro-manufacturing policy had. It accepts that Canadian industry must become more internationally competitive and cannot afford to revert to a program of import substitution industrialization. The domestic market is not seen as an end in itself, but as a base for exporting activity. Multinational corporations should be tolerated, provided they operate according to the government's standards. Market signals should be allowed to continue to map the basic patterns of economic growth; but the government, it argues, should also pick winners and single them out for special incentives by shifting resources to them as quickly as is socially possible and desirable.

The document emphasizes access to world markets and the fullest exploitation of the domestic market through procurement policies (p.71). It argues that Canadian ownership of resources and a 'made-in-Canada' energy policy will make Canadian manufacturing – backed by the government as an active investor – more competitive. The Gray proposal of a new industrial strategy initially wielded a great deal of influence. The National Energy Program fitted like a hand into the glove of the *Gray Framework*. It comprised a package of incentive pricing and taxation measures, aimed at giving the federal government increased control over the oil and gas industry and more of its revenues. It was also designed to encourage Canadian capital to enter the industry, and to accelerate exploration and development on the federal government's Canada Lands. The shortcomings of the NEP, however, which relied on continually rising prices but had the poor timing and bad luck to emerge precisely as oil prices began to decline, contributed towards the eventual waning of the Gray strategy.

In addition, although Gray's framework for implementing the federal government's industry development policy conformed well with the ideas of the rising new bureaucrats (indeed, was probably drafted by them under Cohen's guidance), it was not popular with some in the Cabinet. The Minister of State for Economic Development, Senator H.A. 'Bud' Olson,

quickly set out to produce an alternative document,⁸ and a federal Cabinet meeting at Lake Louise in September 1980 decided that a major reformulation of federal economic policy was necessary.

The Lake Louise meeting called for the 'resource departments' – Agriculture, Fisheries, Forestry and EMR – to prepare industry reviews of their respective situations. The objective of these was to enable the government to work out the details of its new economic strategy, which was to encourage industrial growth by maximizing the development of Canada's natural resources. The Cabinet still had an open mind, however, on the Gray proposals. Indeed, EMR was instructed to deal with the mining industry only, as it was felt that the NEP had already created a fully-developed strategy for oil and gas. The EMR overview was to become, after several revisions and major cuts, *Mineral Policy: A Discussion Paper*, approved by Cabinet in December 1981, and published in March 1982.⁹

The origins of the Olson response to Gray are to be found in the eight-point agenda for economic development announced by him in October 1980. The agenda focused on human resource development, capital investment, development of secure energy supplies, natural resource development, technology, infrastructure, government-business-labour relations, and market development.¹⁰ The approach emphasized capital development and de-emphasized consumption, subsidies and intervention generally.

Olson accepted the need for foreign capital, albeit controlled, and the consequent necessity of a favourable investment climate. He discussed the agenda with the relevant line departments, with all the provincial governments, and with the private sector, and he established a follow-up program. In December 1980, members of the Cabinet Committee on Economic Development were sent guidelines by the Ministry of State for Economic Development (MSED) for the preparation of the departmental overviews which the federal Cabinet had ordered in September.

Olson also produced a Cabinet document entitled *Priorities for Federal Government Economic Development Policies and Expenditures to the mid-1980s*, an important milestone in recent Canadian economic development policy. It represents a significant modification of the interventionist emphasis seen so strongly in the *Gray Framework* and in the NEP, but it should be emphasized that it does not recommend a return to 'traditional' policies confining the government to a support role in the formulation and implementation of economic development goals and policy. It focuses the

8. Williams, 'Trade and Promotion and Canada's Industrial Dilemma', p. 126.

9. Energy, Mines and Resources, *Canada, Mineral Policy: A Discussion Paper*, December 1981, Report MP81-1E, Ottawa, 1982. For a discussion of its genesis and the industry reaction to it, see David Yudelman, *Canadian mineral policy formulation: a case study of the adversarial process*, (Kingston: Centre for Resource Studies, 1984).

10. Sanford F. Borins, 'Ottawa's Expenditure Envelopes: Workable Rationality at Last?', in G. Bruce Doern (editor), *How Ottawa Spends Your Tax Dollars 1982*, p. 67.

concerns and suggestions emerging from questionnaires completed by various departments, from some intensive MSED background staff analysis, and from Cabinet concerns about the outcome of the NEP. It provides the theoretical underpinning for the long-term strategy document later released with the November 1981 budget, *Economic Development for Canada in the 1980s*, which the ministerial strategy papers issued by the resource sectors thereafter were meant to complement.

Olson's *Priorities* recommend four long-term strategic goals, and four more immediate policy challenges.

Strategic goals:

- the importance and priority of economic development policies and expenditures relative to other government policies, programs, and expenditures;
- continued emphasis on expenditure restraints;
- continued emphasis on expenditure programs directed towards productive investment and a reduction of subsidy programs;
- emphasis on policies which accomplish federal objectives by exerting leverage upon the private sector and non-federal government expenditure.

Policy challenges:

- the redeployment of Canada's human resources from areas or industries with low rates of productivity or returns into resource or resource-based, high productivity and high technology industries or areas;
- the establishment of a good climate for productive capital formation with investment focused on resource, resource-related and high productivity industries;
- the expansion and diversification of foreign markets for Canadian resources and high productivity manufacturing and the strengthening of domestic linkages between resource and manufacturing industries to increase productive output;
- the avoidance of transportation bottlenecks to prevent the emergence of impediments to Canadian exports and to meet the requirements of frontier economic growth.

By the time Olson's *Priorities* reached the public in the form of *Economic Development for Canada in the 1980s*, they had been somewhat watered down, as a result of a long and intense summer's bargaining by an *ad hoc* Ministerial Committee established by the Cabinet at a meeting at Meach Lake in June 1981. The committee, composed of Allan J. MacEachen (chairman), Olson, Gray, John Roberts, Pierre DeBane, Ed Lumley and Lloyd Axworthy, was directed to bring together, in a single document, the federal government's economic development policies and priorities.

Despite the tensions among the committee's various members, the differences between its final report and Olson's *Priorities* were minor. *Economic Development for Canada in the 1980s* attempts to justify the NEP (p. 12), but is emphatic that it was a special case, not to be extended to other resource sectors. The highly interventionist tone of Gray's 1980 *Framework* was clearly supplanted, though this obviously did not mean the immediate end of interventionism in the Liberal government. Whereas Gray tended to assume the continued health and growth of the resource sectors, Olson emphasized the need to ensure this through government policy if necessary. Only in this way could they be relied upon to be the foundation of economic development.

Most of the differences between Gray and Olson were ones of degree and tactics. Olson was not, for example, proposing a new strategy which ignored the needs of other sectors of the economy at the expense of the resource sectors. On the contrary, his document shows an acute awareness of the need to utilize Canada's comparative advantage in resources, in a way which, he hoped, would synergistically aid other sectors. There were some differences of principle as well. A major difference between the two was that Olson appeared to be more sensitive to the danger of threatening the viability of precisely those sectors which are seen as best placed to serve as an engine of economic growth, and was decidedly less interventionist.

Finally, and all-important to those concerned with the formulation of mineral policy, *Economic Development* confined itself to the general strategy of economic development, leaving a great deal of leeway for the resource sector studies which were being prepared at the same time to take advantage of its suggestions, expand on them, and even to add new dimensions. It did not lock in those studies in advance to iron-clad commitments and restrictions and, in fact, one of its weaknesses was its concentration on goals without providing the specifics of the policy instruments needed to achieve these goals. It was a consensus document displaying a decided ambivalence on the choice between *laissez faire* and interventionist policies. Nevertheless, it made a clear commitment to use resource projects, especially the energy megaprojects such as tar sands plants and offshore developments, to capture 'Canadian benefits' and maximize industrial spinoffs. EMR, which had been wrestling with the problem of formulating a coherent Canadian mineral policy since the mid-1960s, was thus being asked directly by the federal Cabinet to outline such a policy. It was a guilt-edged opportunity which, for various reasons, was not fully exploited (see next chapter).

Thus the period 1978-82 marked a return to the old federal economic development policy of relying on the resource industries to provide the 'engines of growth'. But this resource-led growth policy differed in important respects to that dealt with in chapter 3. To paraphrase the 1980 EMR

Discussion Paper on Coal, resources were now expected to drive the system instead of follow it.

Some of the reasons for this important change in policy have already been suggested, notably the vastly increased intervention of governments in all facets of society emerging in the 1950s and 1960s with the expansion of welfare services and burgeoning of the bureaucracy. There was also the developing cult of the megaproject (especially energy megaprojects) in the 1970s, arising partly from far greater competition among suppliers of natural resources world-wide, partly from the preference of big government to deal with big (concentrated) industry, and partly because of higher oil prices. But, although *Economic Development* became known as a megaproject strategy (and dismissed by some on those grounds as megaprojects slipped from fashion in 1982 and after), it also advanced a strategy independent of the success of megaprojects.¹¹

It should be emphasized that energy lay at the heart of this new emphasis on resource-led growth and that the Liberal federal government always denied that it was planning an NEP for other resource sectors. In the sense that the government was not planning on 'using the full arsenal of interventionist weapons, from corporate takeovers, to buy-in provisions, massive changes in tax and expenditure revenues and direct regulation',¹² its assurance can be taken at face value. But there are many other methods of intervention (more oblique but nevertheless effective) to achieve similar ends. *Economic Development* specifically singles out agri-food, fisheries, forestry and mining, and the potential of each for greater Canadian 'value added', international trade prospects, and encroachment on provincial jurisdiction.¹³

Many of these policy issues and priorities receded into the background with the plummeting of oil prices and commodity prices generally, and with the overall economic crisis of 1982-83. About \$22.3 billion dollars of energy megaprojects were cancelled and much of the remaining \$19.2 billion were delayed or scheduled for reconsideration.¹⁴ There was a definite shift to what has been called 'the ethos of small-scale development', and a general shift in energy politics to a far less interventionist line on deregulation, oil and gas incentives, and Canadianization.¹⁵ The Liberals had begun to overhaul the NEP in 1983-84, and the new Conservative federal government began, in early 1985, to accelerate the process.

11. G. Bruce Doern, 'The mega-project episode and the formulation of Canadian economic development policy', *Canadian Public Administration*, vol. 26, no. 2, 1983, p. 220.

12. G. Bruce Doern, 'Liberal Priorities 1982: The Limits of Scheming Virtuously', p. 21 in G. Bruce Doern (editor), *How Ottawa Spends Your Tax Dollars 1982*.

13. *Ibid.*

14. Jennifer Lewington, 'Megaprojects replaced by more modest proposals', and 'Energy politics' shift to the right is accelerating', *Globe and Mail*, 1 June 1984.

15. *Ibid.*

This withdrawal from megaprojects, from the selective use of the 'full arsenal of interventionist weapons', and the decline of commodity prices, modified the resource-led growth strategy advanced by the federal government in November 1981. It did not necessarily negate, however, the central principle of the strategy, i.e. emphasizing Canada's comparative advantage in resources where it exists, nor the possibility of using this as the basis of an economic development policy based on the synergies of natural resources and high technology.

It must be conceded, however, that the timing was poor in that attention has shifted from both megaprojects and commodities. Moreover, the method of proceeding with such a policy has not been worked out in concrete terms: EMR and the other resource departments – with the possible exception of forestry – have largely failed to date to capitalize on the Cabinet's invitation to map a strategy for putting themselves at the centre of economic growth policy. Mining representations to the Macdonald Royal Commission on the Economic Union and Development Prospects for Canada were unexceptional and largely defensive, and suggest that EMR and mining may have missed that particular boat. Canada's new economic development strategy, however, has still to be articulated by government.¹⁶ Although EMR has made no further initiatives in the general area of mineral policy since the election of the new government, the mining producers made an urgent and detailed attempt in early 1985 to address the issue publicly, before the crystallization of Conservative policy strategies.¹⁷

Regional Policy

In at least one important area, however, the 1981 strategy of *Economic Development* continues and has been augmented: the link between federal resource policy and regional strategy. In the 1950s the Royal Commission on Canada's Economic Prospects (the Gordon Commission) linked the

16. Whether it should be articulated, moreover, is the subject of a lively debate. See Michael Atkinson, 'On the prospects for industrial policy in Canada', *Canadian Public Administration*, vol. 27, no. 3, 1984, pp. 454-467; Michael Jenkin, *The Challenge of Diversity: Industrial Policy in the Canadian Federation* (Hull: Supply and Services Canada, 1983).

17. Mining Association of Canada, 'Economic renewal and Canadian mining: a submission to the government of Canada by Canada's mining industry', Ottawa, 1985, p. 147. Though the Mining Association of Canada represents mainly the larger companies, the submission was prepared 'in consultation with other associations representing the industry' and 'is endorsed by all provincial mining associations and chambers of mines, the Prospectors and Developers Association, and the Coal Association of Canada' (p. iii).

Various Cabinet ministers and senior officials, including the Minister of Finance, Michael Wilson, personally attended detailed presentations of the document and its arguments in January 1985.

economic backwardness of the Maritimes and the rural areas overall to their inability to participate fully in national economic development.¹⁸ In 1969 the federal government created the Department of Regional Economic Expansion (DREE) to attempt to deal with regional economic disparities. In 1974, DREE initiated a policy of realizing economic opportunities in each province through 10-year General Development Agreements (GDAs). These required an assessment of economic opportunities in each province and the identification of strategic intervention opportunities. Subsidiary agreements aimed at specific economic sectors or activities were then drawn up with the full cooperation of the provinces, with DREE coordinating the programs and bringing in other federal program units as required.¹⁹ EMR contributed to the early GDAs in a number of provinces, using them as vehicles to continue economic and policy assistance to the provinces in the minerals sector.

Although the GDA was seen as a genuine innovation, DREE failed in its political role to create 'national unity' under the federal government²⁰ and came under attack from both Senator Bud Olson and Minister Herb Gray. The emergence in 1980-81 of the interventionist resource-led economic growth strategy further undercut DREE in that it downgraded secondary industry to some extent, and was non-integrative across regions because of its propensity to stimulate export-orientated (resource) industries.²¹ In 1982, DREE's program unit was combined with parts of the Department of Industry, Trade and Commerce to form the Department of Regional Industrial Expansion (DRIE), while part of its policy unit was combined with the Ministry of State for Economic Development to form the Ministry of State for Economic and Regional Development (MSERD).²² In 1984, MSERD was disbanded by Prime Minister John Turner and most of its regional responsibilities transferred to DRIE.

Federal regional development policy under the Liberals aspired to an energy-focused megaproject approach or, failing that, a resource-led policy which was regional by virtue of the fact that the resources are spread throughout the regions. As *Economic Development* put it in 1981: 'Seldom in this century has it been possible to identify genuine prospects for growth in every region. But this is the prospect today' (p. 3). It must be emphasized, however, that a great deal of policy confusion was evident in Ottawa in the

18. See, for example, N.H. Lithwick, 'Regional Policy: The Embodiment of Contradictions', in G. Bruce Doern (ed.), *How Ottawa Spends Your Tax Dollars 1982*, p. 133.

19. *Ibid.*, p. 134.

20. *Ibid.*, p. 140.

21. *Ibid.*, p. 143.

22. Peter Aucoin and Herman Bakvis, 'Organizational differentiation and integration: the case of regional economic development policy in Canada', *Canadian Public Administration*, vol. 27, no. 3, 1984, pp. 348-371.

early 1980s and that the 'rational' non-interventionist approach of Olson and MSED was by no means universally accepted by the government, or consistently acted upon.

The dismemberment of DREE was felt by some to improve federal capability to coordinate its sectoral activities, but to make it more difficult for the federal government to work with the provinces.²³ The subsequent disbanding of MSERD, in turn, put a heavy burden of coordination on DRIE, whose ability to take on the task is still unproven. One of the major thrusts of federal mineral policy after 1982, dealt with in the next chapter, is precisely to achieve this general federal regional goal while at the same time using federal incentives and expenditures to revitalize Canada's demoralized mining industry. The need to make mineral policy consistent with a resource-led economic growth strategy has also been tentatively addressed since 1982, but mineral policy makers have, with some exceptions, continued to await leadership on the details of such a strategy rather than seeking an active role in determining its shape.

23. Lithwick, 'Regional Policy', p. 145.

7. Managing Maturity: Post-1982 Mineral Policy

From the late 1960s it was increasingly argued by economic policy makers that mining had become a 'mature industry' which no longer needed any special incentives from government. The overhauling of the tax system was partly intended to reverse the perceived special treatment which had historically been accorded the industry. By the early 1980s, the term 'mature industry' took on a new meaning in some quarters, frequently being equated with the dreaded status of 'sunset industry'.

To describe the Canadian mining industry as 'mature', however, should imply neither independence from the government incentives and support, nor the inevitability of decline and death. It may be true that Canadian mining is not likely to grow again with the adolescent speed of the 1950s and 1960s; but it is equally true that the mining industry is a long way from its dotage. In such a situation, the term 'maturity' takes on a new meaning: a policy of 'managing maturity' is neither one of milking a self-sufficient industry for the benefit of other sectors of economy or society, nor a policy of gently laying a dying industry to rest.

Canadian mineral policy in the 1980s has to deal with an industry which appears to have ended its rapid growth phase but which is still vigorous and demonstrably able to adapt to the extreme competitiveness of its new international environment. Growth is still possible, indeed likely, but it is likely to be slower or concentrated in specific sectors (such as gold production) and in response to particular market opportunities. 'Managing maturity' in this context means ensuring the most effective possible mobilization of mining's resources to continue to be able to compete in cut-throat international markets. Mineral policy must, in other words, avoid both

- offering corporate bailouts and creating a subsidized, non-competitive industry; and
- a policy of neglect inspired by a prophecy of the decline of the industry, a prophecy that could become self-fulfilling.

Mineral policy since 1982 has begun to wrestle with this new conception of Canadian mining as a 'mature industry', and with new methods of 'managing maturity'. It remains very dependent on general decisions affecting how the Canadian economy as a whole should be managed, decisions with which the Royal Commission on the Economic Union and Development Prospects for Canada (the Macdonald Commission) and the new federal Conservative government are still wrestling. Notwithstanding

the inability of mineral policy to act completely autonomously, it has an important role to play in the process of arriving at an economic development strategy for Canada. Thus far, its success has been mixed.

Mineral Policy: A Discussion Paper

On 8 March 1982, the federal government released *Mineral Policy: A Discussion Paper*.¹ The 157-page report ranges widely, focusing on six areas and detailing 36 measures under consideration by the federal government within these areas. The six areas are the junior mining industry; the mineral machinery and equipment industry; mineral science and technology; employment and quality of working life; international marketing of minerals; and investment climate.

The *Discussion Paper* contains a wealth of detail about Canada's mining industry, and much valuable analysis of particular problems being experienced in the industry. In terms of coherent discussion of Canadian mineral policy, however, it is largely a failure. As a culmination of the quest for an overall federal-provincial Canadian mineral policy starting in 1968, the *Discussion Paper* did not even take up the challenge initiated by Keith Buck and his colleagues.

As a response to the federal Cabinet directive of 1980 and the November 1981 Budget document *Economic Development for Canada in the 1980s*, the *Discussion Paper* failed to come up with a mineral policy which tied in with the Liberal Cabinet's expressed concern to encourage resource-led growth. From the mining industry's point of view, this new-found reiteration in *Economic Development* of the importance of the resource industries, including mining, to Canada's development was vital. A senior committee of the federal Cabinet emphatically and unequivocally stated in *Economic Development for Canada in the 1980s* that the leading economic priority 'lies in the development of Canada's rich bounty of natural resources'. Though this was said in November 1981, when hopes for an energy-led megaproject growth strategy were still high, the policy was reiterated by the Liberal government right through the deep recession in natural resources and until its defeat in September 1984. Nor had the new Progressive Conservative government formulated a new industrial strategy or categorically rejected the old one by early 1985.

A resource-led growth policy is not necessarily a return to the old resource and mineral policy of maximizing growth to serve as an 'engine' for the rest of the economy. Such a policy direction, if seriously followed, would be a significant departure from the mineral policies of the last 15 years. It would be something akin to what has been described on occasion as

1. Energy, Mines and Resources Canada, *Mineral Policy: A Discussion Paper*, Report MP81-1E, Ottawa, 1982.

the 'Australian model'. The model is followed by countries which, having attempted to structure their manufacturing bases in order to become industrial powers through secondary manufacturing, found it advisable to step back at least temporarily and concentrate again primarily upon the production of raw materials for exports. Two of Canada's major competitors for mineral export markets – Australia and South Africa – have to some extent gone through such a process in the 1960s and 1970s. Of course, there are differences between the three countries which are as important as the similarities. In view of these, to what extent, if any, could Canada move towards the 'Australian model'? To what extent does it have any model, indeed any coherent 'mineral policy'? To what extent can or should it have such a policy?

It is clear that the Liberal government was not proposing such a model. Its industrial strategy was not based merely on resource exploitation. In a relatively unformulated way it was aiming at the marriage of Canada's resource wealth with its potential for high technology innovation based on these resources. In *Economic Development* it effectively abandoned the aim of sacrificing the resource industries to subsidized development of manufacturing – partially via a policy of redistribution – and took the advice of those who have argued for Canada to follow its comparative advantage (though this may have been declining).

For perspective it is useful to look back on traditional public policy towards the mining industry. Canada has never been a logical economic unit, with our relatively small population concentrated along a 4,000 mile border with the U.S. Our widely dispersed market has always worked against the development of an effective manufacturing industry, and natural resources have therefore been the logical backbone of the economy. Public policy quite sensibly was to foster those sectors where Canada had a comparative advantage.²

This federal commitment to the centrality of the resource industries raised great hopes in the mining industry, hopes which were bitterly disappointed by EMR's *Mineral Policy: A Discussion Paper*.³ The paper contains no

2. Alfred Powis, 'Public Policy and the Mineral Industry', Second McParland Lecture, 24 November 1976. For a useful reiteration of the argument that Canada still enjoys a comparative advantage in resource-based products, see Christopher Beckman, 'Canada's International Trade Performance: A Survey of Recent Trends', (Ottawa: The Conference Board of Canada, 1982).
3. David B. Thomas, President, Mining Association of Canada, to Mrs. Judy Erola, Minister of State (Mines), 29 March 1982: 'Another reason for the industry's initial reaction [critical of the Discussion Paper] is the air of expectation established by the paper *Economic Development in the 1980s*, which was released with the recent Budget. In that document, the government indicated that policies would be brought forward to encourage and strengthen certain sectors of the Canadian economy, including mining. Hence, I think the industry anticipated a much different mineral policy statement than has emerged'.

major new initiatives. Even worse, though it explicitly claims to reflect 'the themes and priorities identified in the economic development document' (p. iv), the *Discussion Paper* was largely developed in isolation of *Economic Development* and devotes virtually no attention to following up and buttoning down the very explicit commitments to resources made by the Cabinet committee.

Much of the mining industry, which expected EMR to actively promote its health, regarded this as a serious missed opportunity.⁴ Supporting this view, one informant has said that it was only just before printing the *Discussion Paper*, and after explicit encouragement from another federal government department, that EMR even inserted a mention of the *Economic Development* document.

Though it has a good working relationship with the mining side of EMR, the industry tends to feel that many of its problems are connected to federal policies which are completely out of EMR's jurisdiction. Its access, for example, to the Department of Finance is more limited and a source of frustration. Rightly or wrongly, the mining industry saw the *Economic Development* paper as a green light to it from other areas of the federal government and was all the more keenly disappointed when the EMR paper apparently failed to capitalize on this.

Managing Maturity

It is only fair to point out that, while some disappointment at the *Discussion Paper's* failure is justified, some of it also stems from a yearning for the Golden Age of the ostensibly never-ending expansion of the Canadian mining industry. When a sector of the economy is expanding, policy has to meet the challenge of managing growth by coordinating the development thrust. But when the sector has reached maturity or is contracting, policy has to some extent to meet new challenges by coordinating a concerted trade and competition thrust. When the days of seemingly limitless expansion and market outlets are over, mineral policy tends to change focus to problems of selling what is coming on to the market from already-installed productive capacity. Other maturity issues include environment, safety, and quality of investment.

In the case of Canadian mining, mineral policy has begun to shift to managing maturity (sometimes loosely called 'adjustment policy') and this can be seen in the heavy and perhaps justifiable new emphasis on international marketing, market access, and productivity. This new emphasis on managing maturity has been accelerating rapidly since the extreme depres-

4. For a detailed treatment of the mining corporations' reactions to the *Discussion Paper*, see Yudelman, *Canadian Mineral Policy Formulation*.

sion in the industry in 1982-83, and since the *Discussion Paper* failed to provide policy direction.

Whether Canadian mining has actually reached a state of 'maturity', and whether this means that policy should now de-emphasize the management of growth, are contentious issues. They have been further complicated by the use of the highly emotive term, 'sunset industry', which indicates that – in the minds of some – mining is not merely in a mature phase, but in a phase of permanent decline. The sunrise-sunset issues are clearly beyond the scope of this study. This is a basic question for many sectors of the Canadian economy as a whole, an issue on which the Macdonald Commission initiated serious discussion.⁵

What is clear, however, is that the management of maturity is the new focus of mineral policy. There have also been government measures to encourage and manage growth, and designed to facilitate investment, especially in the smaller ('junior') mining companies. Measures to help the junior companies, such as devising means by which they can utilize tax incentives formerly available only to companies with a diversified source of taxable income, have begun to redress the imbalance of fiscal mineral policy in favour of the large companies which had developed after 1972. To date, however, these have been palliative measures to help a stricken industry rather than a concerted mineral policy thrust.

What, then, are the central policy elements of managing maturity in the mining industry? The two central policy elements are:

- i the enhancement of productivity, innovation and competitiveness;
- ii the cultivation of synergistic linkages to other areas in the economy and polity.

The two elements can be further divided into:

- i research and development;
trade and competition;
- ii diversification and procurement;
regional policy.

The first pair, though not of course uniquely a response to maturity (both contain elements of the older mineral policies of growth and redistribution), have become fairly unambiguous components of mineral adjustment policy. They are, moreover, relatively uncontentious areas in that federal and provincial governments, corporations and labour are largely in agreement on all the basic issues. The role of governments in these areas is that of a service organization, a role which is generally acceptable to all parties. These two areas will thus be dealt with only briefly here.

5. David Yudelman, *Mining and the Macdonald Commission: The State of the Industry in the Mid 1980s* (Kingston: Centre for Resource Studies, 1985).

The areas of diversification and procurement, and that of regional policy, however, are far more contentious and ambiguous. They have profound implications for development policy as well as adjustment policy, and thus regional policy, in particular, will be considered in greater detail.

RESEARCH AND DEVELOPMENT POLICY

Mineral Policy: A Discussion Paper argues for a less passive, indirect approach to the mineral industry. A more active federal role requires greater harmonization of efforts; rationalization of mineral research and development (R&D); more socially-orientated R&D; greater technology acquisition and information dissemination; and more federal action in the area in implementing new technology by demonstrating its practical utility (pp. 135-6). Since the *Discussion Paper* was published, several new initiatives have been taken: for example, the Science and Technology Assistance (START) program allows the federal government to waive certain research and development charges to the private sector, and gives the latter enhanced access to EMR's Canada Centre for Mineral and Energy Technology (CANMET); the Geological Survey of Canada is using new geophysical techniques to work on exploration development.

Much of EMR-funded research is mission-oriented, geared to EMR's own mandate and missions. It includes R&D that is general and benefits society as a whole, as well as focused support for industrial and university research. In 1980, the federal government provided \$34.9 million, or about 16 percent of R&D expenditure in the mineral sector. In 1982-83 the figure had fallen to about \$30 million, even without adjusting for inflation.⁶

The CANMET program ranges widely, including policy R&D, protection technologies (health, safety and environment), and productivity technologies. But, as one might expect of a policy geared to managing maturity and to adjustment problems, 'high priority has been given to Productivity Technology', with 'a strong emphasis on technology improvement or development leading to improved productivity and hence competitiveness'.⁷ The Mulroney government has promised to double the national commitment to R&D within four years, and this might benefit mining R&D as well, reversing the recent decline.

Research and development and innovation can also have the dual function of meeting current concerns about the environment (which can no longer be ignored, as they once could during the heyday of the mineral policy of growth), without sacrificing significant and otherwise viable sectors of the mining industry. The acid rain issue is an important one for the

6. Energy, Mines and Resources Canada, *Mining, Mineral and Metals Technology 1983 and the Role of CANMET*, Ottawa, 1983, pp. 5, 31.

7. *Ibid.*, p. 66, p. 8.

mining industry, both symbolically in demonstrating its maturity and suitability for continued support from Canadian governments and society, and economically in that the potential costs of solving the problem are enormous and difficult to specify precisely.

The political context of the issue is that the Canadian electorate is sufficiently concerned over the issue that, according to public opinion polls, there is general support for active measures to check pollution even if some jobs have to be sacrificed to achieve this. It is thus an issue which neither governments nor the mining industry can afford to ignore. Yet both are hesitating to take firm action, in spite of the opening of high level channels of communication some time ago, and the availability of detailed work on the costs and feasibility of concrete action.⁸

The reasons for failing to act are clear: the costs of significantly cutting acid rain are likely to be very considerable. The industry, only slowly recovering from an acute financial crisis, argues a strong case that it is in no position to foot the bill. Governments also wish to avoid laying out large sums to finance cleaner, more efficient smelting and processing by the private sector. Even more important, they are concerned to keep mines open and jobs alive and to avoid jeopardizing their survival by enforcing costly pollution controls.

It is possible that the inaction on the acid rain issue, however compelling the above reasons, might be a mistake even from the narrow self-interest of governments and companies. The industry denial that the connection has been made between pollution from smelting and acid rain is scientifically debatable but politically indefensible. Moreover, governments which advocate resource-led growth on the understanding that its benefits will be maximized by technological innovation, while its social and environmental costs will be minimized in the same way, cannot afford to be inactive on such an obviously relevant issue.

Clearly, there is no simple and attractive solution to the acid rain issue at this time. The costs of action are all too clear, but it is possible that the costs of inaction have not been fully thought through. Two major dangers of the acid rain issue are that it threatens public acceptance of mining as a mature, socially-responsible industry which has left the smokestacks behind it, and it weakens the mineral policy of managing maturity itself.

On the other hand, the latter policy offers real opportunities to both governments and industry on the acid rain issue. Given the centrality of the issue to the future acceptability and development of Canadian mining, industry and governments could decide to make a concerted joint effort to further develop and utilize the existing technology and in this way to

8. *Acid Rain Controls and the Economics of the Canadian Nonferrous Mineral Industry*, Proceedings No. 12 (Kingston: Centre for Resource Studies, 1982).

achieve both cleaner and more economically efficient processing and smelting of minerals.

Kidd Creek Mines has achieved this. Raymond Clarke, its former chairman and Chief Executive Officer, says flatly that controlling pollution can make a producer more efficient and competitive:

...I firmly believe the competitive position of a particular miner and marketer of minerals is enhanced by the availability of efficient emission-controlled smelters and refineries. In the sense that any addition of greater competence to an industry must bring some added level of efficiency to the whole, then our belief must be that Canada's nonferrous metals industry will become more competitive. The industry will recognize in action that emission control is a relatively low-cost insurance premium.⁹

Clarke reviews in some detail the economic advantages of using even currently available technology to reduce smelting emissions, which is probably one of the major causes of acid rain, and ends by underlining how Kidd Creek Mines has profited by moving to face the problem before being forced to do so by regulation:

The logical conclusion is that an acid-rain-free smelter is not a novelty but a sound investment. We enjoy having plants that we know can face the regulatory future with confidence. It's a most competitive feeling.¹⁰

Clarke's argument is conclusive for the setting up of new capacity, where the costs are minimized and the benefits maximized. Retooling older smelting capacity, however, is far more expensive and less effective and may not always be totally feasible. In such cases, governments and industry need to start by clearly expressing their concern over the issue and according it high priority, rather than lamely arguing that there is not yet any irrefutable proof that pollution causes acid rain. Even if it does not, it is still not defensible on the scale at present being inflicted on the environment. Governments and industry, for their own sakes, must accept their joint responsibility to act quickly and develop a coherent program of action. This would go a long way toward defusing the issue politically.

Even more important than the issue of convincing public opinion, urgent action on acid rain would be consistent with Canadian mining's new maturity status, and its need to upgrade the quality of its operations both in terms of economic efficiency and social acceptability. Taxpayers would be far more likely to accept a greater share of the burden of financing the cleaning up of acid rain if the process were to be seen to be a move toward higher-technology socially-responsible mining, rather than an enforced

9. P.R. Clarke, 'The effect of new smelters on the competitive position of Canada's nonferrous metals industry', in *Acid Rain Controls and the Economics of the Canadian Nonferrous Mineral Industry*, p. 22.

10. *Ibid.*, p. 26.

bailout of a socially-irresponsible smokestack industry. In this context, the role of research and development, and of innovation, is clearly pivotal.

TRADE AND COMPETITION POLICY

The federal government now sees its role in this area largely as a facilitator.¹¹ Its policy aims to foster Canada's mineral industry by improving access to markets; countering unfair competitive and trading practices of Canada's competitors; export promotion; and having Canadian interests taken into account in the formulation of international agreements affecting mineral markets. It also hopes, somewhat optimistically, to use Canada's position as a reliable long-term supplier, to gain greater access to certain markets 'for other Canadian products as well'.¹²

This general area of international marketing of minerals has been given high priority by EMR since 1982. In January 1983, the Mining Association of Canada (MAC, the organization representing the medium and large companies) formed a joint committee with EMR, the MAC-EMR 'Subgroup on International Mineral and Metal Markets', to examine trade issues and Canada's competitive position.¹³

In addition, in May 1983, EMR hosted a large conference in Ottawa attended by provincial, industry, labour, academic and diplomatic observers: the 'Canadian Mineral Outlook Conference: 1983'. The conference, aimed mainly at the broad dissemination of information rather than the formulation of mineral policy, was repeated in 1984 and may become an annual event, timed to coincide with the spring Provincial Mines Ministers' meeting and MAC's annual general meeting.

International marketing of minerals is an area in which there is a broad domestic consensus between the mining industry and the federal and provincial governments. It is also an area which has become more important by virtue of the extremely competitive nature of world mineral markets in the 1980s. Thus international marketing is a policy issue which is both uncontentious and important, and a natural candidate for intensive federal effort. A recent example of this has been the issue of the export of steel and copper to the United States, in which the federal government has had some success in resisting growing U.S. protectionism. Another is the ongoing

11. EMR, *Mineral Policy: A Discussion Paper*, pp. 141-151.

12. *Ibid.*, p. 151. See Patrick James Caragata, *National Resources and International Bargaining Power: Canada's Mineral Policy Options* (Kingston: Centre for Resource Studies, 1984), for an outline of the limits of Canadian leverage in resource and mining diplomacy.

13. See Winston G. Chambers and P. Lafleur, 'Market Share and market access: the Canadian mineral industry in a changing world economy', EMR, mimeo, Ottawa, December 1982.

discussion on free trade with the United States on a bilateral basis, possibly even on a sectoral bilateral basis.

Government action, however, can have only a limited direct effect on the problems of international marketing, through diplomacy, data collection and dissemination. The real problems remain international competitiveness and comparative advantage,¹⁴ and these are far tougher and more intractable issues. They really need to be handled through great advances, in research and development (which are only beginning to focus in detail on it), in innovation, in productivity generally, and through a fundamental restructuring of taxation policy and the investment climate. The federal Liberals began to improve the last-mentioned in 1983, but by fine-tuning rather than a policy overhaul. Investment climate will clearly be a top priority for the new Conservative government, though the concrete strategy for improving it has yet to be published.

PROCUREMENT AND DIVERSIFICATION POLICY

Procurement policy is dealt with in *Mineral Policy: A Discussion Paper* largely under the heading of 'Mineral Machinery and Equipment'. This is one of the few areas in which the Discussion Paper appears to be attempting to meet squarely the challenge posed by the Cabinet directive from Lake Louise in September 1980, as well as the Cabinet's *Economic Development for Canada in the 1980s* in November 1981. Though the term 'procurement policy' has come to take on the connotations of direct government intervention and coercion, its most efficient application (e.g. Swedish mining and mining machinery manufacture) has been associated with the carrot rather than the stick: synergies in this area seem to be best achieved through the application of incentives.

A major part of the Lake Louise mandate was to find industrial spinoffs from resource development. Procurement, then, is not justified merely as a method of protecting domestic markets for Canadian suppliers, but as a means to achieve greater industrial diversification in all sectors of the economy. EMR makes various policy suggestions to achieve this end:¹⁵

- procurement policy and strategic planning via the federal instruments of the Office of Industrial and Regional Benefits (OIRB) and the Industrial Opportunities Program (IOP). Procurement from Canadian sources to be encouraged, but 'buy provincial' legislation should be prevented from balkanizing Canadian industry;
- product mandating, allowing Canadian subsidiaries of international companies to sell to world markets;

14. Yudelman, *Canadian Mineral Policy Formulation*, pp. 56-57.

15. EMR, *Mineral Policy: A Discussion Paper*, p. 121-123; Yudelman, *Canadian Mineral Policy Formulation*, p. 45-47.

- broadening product coverage: mining companies to be induced to diversify into the equipment industry, with federal help for promising projects, R&D, and export promotion.

Though these policy suggestions at least attempt to deal with the Lake Louise directive and to face up to the crucial issue of integrating mineral policy with Canadian economic development policy overall, it is debatable whether the suggestions go far enough to achieve anything new or fully accommodative of the problems of the 1980s. The suggestions tend to rely largely on the hope that the proposed megaprojects might create large internal markets. This amounts to a variation on the old 'infant industries' policy theme, which has recurred in Canadian industrial policy for about a century. The actual policy tends to place too much emphasis on domestic substitution for imports (and thus the protection of local suppliers which the mining industry end-users oppose), and too little on the encouragement of competitive exports.

The modern history of procurement dates back to the mid-1960s, when the Minister of Trade and Commerce, Robert Winters, issued a set of 'Guiding Principles of Good Corporate Behaviour'.¹⁶ Since then, the federal government has increasingly used purchasing patterns in the private sector as an instrument of industrial development policy.

As a consequence of the Northern Pipeline Act of 1978, the Foothills Group of Companies (which became Nova) was required to demonstrate in writing to the Northern Pipeline Agency how fair and competitive opportunities were being guaranteed to Canadian suppliers. Nova's response became the model for federal agencies' subsequent expectations of other companies. Other boosts to procurement policy came from the NEP, its enabling legislation, the Canada Oil and Gas Act, and the Major Projects Task Force of June 1981. The mining sector became more directly concerned in the procurement issue with the establishment, in August 1981, of the Office of Industrial and Regional Benefits (OIRB).¹⁷

OIRB's mandate covers all major resource projects, including mining, of over \$100 million. It provides guidelines to such projects which, in the case of mining, are 'voluntary', and intended to ensure that Canadian suppliers have full access to major project opportunities, and that their capabilities are actively promoted to project developers. *Economic Development for Canada in the 1980s* reiterated this focus on megaprojects and

16. Ed Arundell, 'Mining and procurement policies', *CRS Perspectives*, no. 16, (Centre for Resource Studies, Kingston, (Canada), no. 16, September 1983, (Kingston: Centre for Resource Studies, 1983), pp. 1-3. See also Mining Association of Canada, 'Procurement Policy in Canada: emerging trends and their impact on the mining industry', Ottawa, 1982.

17. Arundell, 'Mining and Procurement Policies', p. 2.

spinoff industrial development, as did the restructuring of federal departments (see below) in early 1982, which served to strengthen OIRB.

Provincial governments also began to develop procurement policies, with concerted initiatives coming from Alberta and Saskatchewan. British Columbia issued *Procurement Policy for Major Project Development* in June 1981, containing a set of 'voluntary guidelines' which 'found their way into the province's procedures for granting approval for mine development and expansion, thereby raising some doubt about their "voluntary" character'.¹⁸ Quebec and New Brunswick also started discussing an industrial benefits policy at this time, and Ontario opened the Resource Machinery Development Centre in Sudbury and discussed support for Inco's venture into mining equipment manufacturing.¹⁹

Procurement policies which are not voluntary in nature are almost universally detested by those on whom they are imposed because they tend to raise costs, lower international competitiveness, and restrict flexibility of sourcing of supplies. Free-traders also oppose procurement policies in principle. Nevertheless, it is doubtful whether even the new Mulroney federal administration will completely backtrack on them. The technique is common among Canada's trading partners and, moreover, ties in neatly with the former Liberal government's development strategy as well as Mulroney's emphasis on research and development. If there is any change, it is likely to be a subtle shift toward flexible general incentives encouraging domestic procurement, and away from hard and fast rules and regulations.

REGIONAL POLICY

Federal regional policy, as we have seen, shifted at the end of the 1970s. It changed focus from creating and nurturing secondary industry in regions suffering from endemic unemployment to a renewed emphasis on the importance of the resource industries in generating jobs, both directly and via ripple effects. This new emphasis emerged clearly in the Lake Louise Cabinet directive to resource departments in September 1980 and the November 1981 Budget document, *Economic Development for Canada in the 1980s*.

Partly as a result of this process, a reorganization²⁰ took place in the federal bureaucracy which is relevant here because it has important implications both for how mineral policy will be formulated in future, and what the

18. *Ibid.*

19. Yudelman, *Canadian Mineral Policy Formulation*, p. 49.

20. This section is based largely on interviews with federal government officials and press reports. See 'Drie still awaits its place in the Cabinet sun', *Financial Post*, 12 September 1982; Office of the Prime Minister, 'Reorganization for Economic Development' (Ottawa, 12 January 1982); Prince and Doern, *Federal Policy and the Role of Enterprise in the Mining Sector*, p. 9.

policy will be. The reorganization relating to economic development policy (see chapter five) has affected several major federal departments, most dramatically the Departments of Regional Economic Expansion (DREE), Industry, Trade and Commerce (ITC), and External Affairs.

At the beginning of 1982 the amalgamation of DREE and ITC to form the Department of Regional Industrial Expansion (DRIE) was announced. The enlarged department appeared, however, to lose some of its dominance in industrial strategic planning to a revamped Ministry of State for Economic Development (MSED). In the January 1982 shake-up, MSED was also reorganized to give it a more regional orientation, as well as policing powers over 21 other departments with regional responsibilities. MSED then became the Ministry of State for Economic and Regional Development (MSERD). Finally, the Department of External Affairs took over ITC's trade branch.

Thus DREE's regional development role was largely taken over by MSERD, while ITC's trade role went to External Affairs. Neither the DRIE nor the External Affairs reorganization proceeded smoothly. In June 1983, following a long period of demoralization in DRIE (which seemed to be losing its policy-making functions), the Deputy Minister in charge of the reorganization was replaced.²¹ In July 1983, an attempt was made to reconcile warring trade and political wings in External Affairs by reorganizing the department a second time. It is now to run along geographic lines, with trade and political functions combined under the same senior officials. The new structure takes 14 charts to explain.

It is still not clear who will exercise leadership in industrial development policy, or whether the new Progressive Conservative government will make fundamental changes. The Turner government abolished MSERD in mid-1984 and it was not reinstated by Mulroney's government. Most of its regional functions have been transferred to DRIE which, under its new Minister, Sinclair Stevens, has a heavy burden of responsibility for coordination and has yet to prove itself. The line departments may also be given a larger role in formulation and implementation of regional developments than during the ascendancy of DREE. Traditionally, ITC was perceived to be too Ontario-orientated and centralist, while DREE was seen to be the "provinces' department", with a poor reputation for economic efficiency and for getting the federal government due credit and visibility for funds transferred to the provinces. MSERD was designed to be a policy secretariat to the Cabinet Committee on Economic and Regional Development (CCERD) with the object of coordinating the overlapping functions of ITC and DREE. It was expected to help strike a better balance in development policy. This means it had to reconcile sectors, such as natural resources and manufacturing, as well as regions. It had no line functions, however, and the

21. Toronto, *Globe and Mail*, 'New force on External gets lifted again', 12 July 1983.

sectorally-orientated companies continued to deal more frequently and familiarly with DRIE, a fact which might have contributed to MSERD's eventual demise.

To attempt to put teeth into its new role, MSERD established the Federal Economic Development Coordinators (FEDC, or 'Fedcee') program in 1982. A senior MSERD coordinator was sent to each province with the object of developing priorities within the regions (for 'regions' read 'provinces'). These coordinators reported through MSERD to the Cabinet Committee on Economic Development. They were the eyes and ears of the Cabinet committee and expected to operate with the regional economic community as a whole, not just the provincial governments. As such, they also aimed to identify and initiate projects in collaboration with the private sector, and they coordinated the efforts of the federal line departments, such as EMR. The Fedcees were also expected to act as project managers for major federal development initiatives: as they did, for example, in the Nova Scotia ocean industries spinoff project. The FEDC coordinators, now reporting to DRIE and known as 'federal coordinators', have been kept in place by the Mulroney government.

The FEDC program also initiated a new generation of general agreements between provinces and the federal government, identifying development priorities. These are known as Economic and Regional Development Agreements (ERDAs), the descendants of DRIE's General Development Agreements (or GDAs), now administered by DRIE. The FEDC program continued unchanged, but with a somewhat lower profile, after MSERD was dismantled. MSERD's regional personnel began reporting to DRIE from late 1984. The role of the line department, such as EMR, continues to be that of initiating policies within its specialized areas in the relevant ERDA and its subsidiary mineral agreements.

EMR had not followed through systematically on the Cabinet directives with regard to regional policy in its *Mineral Policy: A Discussion Paper*. But as early as January 1982, consultations began at a Federal-Provincial Mines Ministers Conference with the object, among other things, of setting up a federal-provincial-industry-labour task force to examine the special problems of communities dependent solely on the mining industry. This task force was distinct from the existing Federal-Provincial Working Group, which was engaged in examining mining taxation and the junior mining companies, and from the concurrent agreement to examine the feasibility of a national accident data base for mining.

The Task Force on Mining Communities was directed by the Mines Ministers in December 1982 to come up with specific proposals for implementation. It published a report in 1983,²² giving the preliminary results of

22. Task Force on Mining Communities, *Report of the Task Force on Mining Communities*, Ottawa, 1982.

its work which were subsequently examined in some detail in a two-day policy seminar attended by governments, industry, community representatives, consultants and academics.²³ Though the issue continues to be examined, no comprehensive policy has yet been implemented.

More central to the general issue of mineral policy, however, were the steps taken by EMR to coordinate with MSERD and its FEDC program, and to take over the responsibility for regional mineral policy previously exercised by DREE. This evolving mineral strategy has even been seen by some within EMR as an *alternative*, rather than a supplement, to a national mineral policy.

To understand the contemporary issue, it is necessary to understand the evolution of federal mineral and regional policy which occurred because of the divided responsibilities of EMR and DREE. The changes since 1982 left a policy vacuum in the provinces; from late 1982 EMR has pushed fairly aggressively in Cabinet for more resources to allow it to fill this gap and at the same time evolve a new national mineral policy, regionally focused. The historical background illuminates the implications of this new initiative.

As has been shown above (see chapter 3) EMR was commissioned to do a series of reports for various provinces in the late 1960s, advising them as to how they might improve their mining departments and, in some cases, to upgrade them from 'custodians' to a more pro-active role, as 'managers' of their mineral resources. This help backfired to some extent, as the federal government lost ground in resource policy leadership to the provinces in the early and mid-1970s. Admittedly, the provinces have long had the constitutional prerogative over mineral resources, including exploration, development, conservation, and management. Nevertheless, the federal leadership in research and its control of 'horizontal' policy areas such as fiscal policy and trade created a situation in which EMR could argue in private in the early 1970s that, notwithstanding Section 109 of the 1867 BNA Act, federal jurisdiction in the mining industry 'is such that its influence on the nature, scope, location, and timing of mineral development may at least equal that of the provincial governments'.²⁴

EMR worked actively with the provinces on mineral policy since the early 1950s. After 1969, the mechanism was the federal-provincial agreements, which were transformed into offshoots of the General Development Agreements (GDAs) after 1974. For the rest of the 1970s EMR played no role

23. The proceedings have been published: *Mining Communities: Hard Lessons for the Future*, Proceedings No. 14 (Kingston: Centre for Resource Studies, 1984). See also Northern Resources and Economics Planning Branch, *Northern mining communities*, Report NM:3 of the Northern Mineral Policy Series (Ottawa: Department of Indian Affairs and Northern Development, 1983).

24. EMR, 'Progress Report on National Mineral Policy Objectives', appendix F, p. 4. See also above, chapter 4.

in the analysis of needs and opportunities and, in general, was confined to reacting to DREE initiatives and DREE-funded agreements. The mineral agreements focused on stimulating mineral exploration by improving the geoscientific data base and by providing some assistance for development opportunities such as further processing. When DREE became DRIE, the sectoral or line departments became responsible for regional initiatives within their area of expertise, and EMR requested substantially more money and personnel for its Regional Mineral Development Division of the Mineral Policy Sector.

EMR argued to Cabinet that there were basically three approaches possible for federal mineral policy in meeting regional realities:

- i development of mineral strategies specific to each region, in cooperation with the provinces, to be implemented through federal-provincial agreements;
- ii development of a national mineral strategy to be unilaterally and equally applied through the regions by the federal government;
- iii responding to requests for assistance on a case-by-case *ad hoc* basis.

Though framed as alternatives, options one and two can be seen as complementary, rather than contradictory, at least with respect to the formulation of strategy. The federal government has to decide what resources to put into the regional programs, both individually and collectively, regardless of whether it cooperates with the provinces or not, or whether it organizes in terms of region-specific or nation-wide strategies. Thus option one still presupposes a prior national strategy, as outlined in option two.

EMR supported option one, and has been backed by the Cabinet so far in emphasizing the link between mineral and regional policy. On 4 May 1983, the Cabinet Committee on Economic and Regional Development (CCERD) instructed the Minister of State (Mines) to discuss possible mineral sub-agreements with the provincial governments, and then submit these for approval in detail by CCERD. The subagreements would be limited to geoscience, R&D in exploration technology, mining and process technology, and other fields within federal jurisdiction. Two days later, on 6 May 1983, provincial ministers at the Federal-Provincial Mines Ministers meeting unanimously supported federal-provincial negotiation of minerals sub-agreements.

This 'new generation' of mineral subagreements differs from the DREE mineral agreements in important respects.²⁵ Under the old agreements the province delivered most of the programs, but under the new agreements the

25. A. Clark and J.E. Reeves, 'Federal-provincial mineral agreements: an opportunity for industrial minerals', paper presented to the Canadian Institute of Mining and Metallurgy annual general meeting, Ottawa, 17 April 1984.

federal government and the province each fund and implement their own programs.

The mineral development agreement provides for a high degree of co-ordination in the planning and carrying out of these parallel activities. For instance, a provincial program might provide for the collection of samples and a complementary federal program might have CANMET conducting investigations on these samples.²⁶

The objective is to ensure jointly planned and coordinated programs, taking both federal and provincial priorities into account as far as possible, but separately implemented. This so-called 'parallel delivery' of programs seems to be motivated by the desire of each level of government to maintain a 'high level of visibility', which is bureaucratic jargon for saying that each level wants to ensure it gets credit among voters for its respective contributions.

The federal government and EMR seek areas such as exploration and R&D where they have some jurisdiction and where the provinces would welcome help. The object, aside from 'visibility', is to alleviate regional employment and development problems, and in mid-1983 EMR suggested preliminary specific programs which were projected to cost the federal government \$100 million over the following five years (\$42 million for Quebec, \$25 million for Ontario, \$25 million for New Brunswick, \$8 million for Saskatchewan).

Since then, several mineral development agreements have been signed, including those with New Brunswick, Newfoundland, Nova Scotia, Manitoba and Saskatchewan. An example of a mineral development agreement is reprinted below as appendix 1. The agreements are all subsidiary to general Economic and Regional Development Agreements between the federal government and the respective province, and they contain budgets and details of the projects to be financed and implemented by each party.

The importance of mining and mineral policy to regional development in Canada has been evident for well over 100 years. Mining has, as we have seen, been vital in opening up various regions of the country, in pushing back frontiers, and, above the tree line, providing the major opportunity for commercial development. Some examples of the large regional impact are the placer gold discoveries in British Columbia in the 1860s; the mining of asbestos in the Eastern townships of Quebec in 1878; the discovery of nickel and copper in Sudbury in 1883; the discovery of lead and zinc in south-eastern British Columbia in 1892; and the commissioning of the first smelter at Trail in 1896. More recently, in 1956, the discovery of a large nickel orebody beside the Burntwood River in Manitoba led to the creation

26. *Ibid.*, p. 3.

of the city of Thompson and the opening up of northern Manitoba, as well as subsequent hydro developments on the Nelson River.

The federal-led new regional and resource strategy looks forward to the identification of new opportunities of similar scale and importance, and provides a framework within which federal and provincial governments can collaborate on selected projects, preferably of both national and regional importance. While the recession in the Canadian economy lasts, the new regional policy will attempt to encourage resource-led industrial diversification, strengthening the existing economic base, and preserving jobs in the mining areas.

This regional policy is not, as some of its more enthusiastic advocates have argued, a mineral policy in itself. But mechanisms have now been initiated which bring mineral policy into line with the federal regional strategy emphasized in the November 1981 paper, *Economic Development for Canada in the 1980s*. Hence the emphasis on the federal role in the management of federal-provincial projects and the tendency to equate 'provinces' with 'regions'. Clearly, resource projects are vitally affected by provincial prerogatives and laws. Equally clearly, particularly when they are very large projects, they need to be coordinated nationally. The federal government seeks not merely increased visibility, but an ongoing role in this coordination.

Megaprojects failed to develop rapidly in the early 1980s, largely because of world-wide overcapacity in resources, and plunging prices. This was naturally a setback to a strategy partially posited on megaprojects, though not necessarily a long-term disqualifier.²⁷ 'Mini-megaprojects' are beginning to return to the drawing boards, and are even being implemented (e.g. the go-ahead for the \$300 million Imperial Oil Cold Lake oil sands project in Alberta in September 1983).

More important, however, is the fact that the new regional and resource-based structures could provide the skeleton for a more coordinated and rational economic development policy for Canada. There is no guarantee, of course, that the new structures and priorities will continue to be preserved by the new federal Progressive Conservative government or that they will be fully effective in achieving their objectives.²⁸ But the economic development strategy which the Conservatives outlined before the 1984 general election, skimpy though it is, is consistent with the resource-led diversification and regional growth policy.

27. G. Bruce Doern, 'The mega-project episode and the formulation of Canadian economic development policy'.

28. See Peter Aucoin and Herman Bakvis, 'Organizational differentiation and integration: the case of regional economic development policy in Canada', *Canadian Public Administration*, vol. 27, no. 3, for an outline of continuing obstacles which could frustrate the objectives of the reorganization.

Future Policy

The elements of an embryonic new mineral policy, then, comprise a renewed and intensified focus on research and development, innovation, international trade and competitiveness, procurement, and regional-resource links. There is not yet anything one might call a national mineral policy. The hard choices on detailed priorities have not yet been taken. No overall strategy has been articulated.²⁹

Nevertheless, it would not be unreasonable to predict that the above elements of mineral policy will comprise an important part of the blend that will make up any new policy. Nor would it be particularly reckless to suggest that the future mineral policy under the Conservatives might well continue to emphasize the management of maturity. Mulroney's consistent emphasis on substantially increased R&D expenditures, productivity improvement, enhanced competitiveness, adjustment to new world realities, and better relations with the provinces all point in that direction:

... most importantly, managing change means changing our attitude towards growth. It means ending our complacent reliance on natural resources, and shifting our efforts to human resources. For years, we have been living off our natural capital – depleting the nation's finite resources. If we have learned anything from the past decade, it is that the real source of wealth is human capital.³⁰

At one level, this could be a variant of the old conservation or industrial diversification arguments. At another, it is an argument to use the nation's natural resources to reinvest in human capital, and is fully consistent with the notion of managing the mature phase of the resource industries. This does not mean the Conservatives will duplicate Liberal mineral policy. There are different ways to manage maturity, ranging from phasing sections of the industry out and starving them of government backing, to helping optimize the industry's developed resources, labour, and managerial skills in a difficult competitive world.

The policy variations possible under the rubric of managing maturity remain enormous, but what is important to note is that the old mineral policies which served for so long in Canada, policies focused on nationalism, or growth, or redistribution, have been superseded. This is so in spite of the fact that problems similar to those from the past continue to recur in the present and will do so in the future. The governments, the companies, and labour will always debate such issues as tax and the optimal

29. Some would even argue that such a strategy is undesirable. See chapter 5, footnote 19.

30. Brian Mulroney, 'On the issues: Brian Mulroney and the Progressive Conservative agenda – statements of policy and principle, May 1984' (published by the Progressive Conservative Party).

division of mineral revenues as they always have. But they now do so within a new policy framework of managing maturity which, although it leaves scope for large and crucial variations in detailed policies, at least provides the mineral policy-making process with an agenda and a direction.

8. Conclusion: The Ambiguous Legacy

This study has sketched a history of Canadian mineral policy in the hope of expanding our understanding of the present as well as the past. It has also examined contemporary mineral policy and attempted to analyze it in the context of changes in Canadian economic development policy overall. Some tentative policy conclusions will now be drawn, based to some extent on the experience of the past. This is necessarily a subjective process, and it should be emphasized at the outset that, if history provides any lessons, they are almost inevitably ambiguous. Thus these policy conclusions are based on the author's interpretation of the history and its application to the present. A different interpretation of the same history could lead to quite different conclusions.

Post-War Mineral Policies

The foundations of modern Canadian mineral policy were laid between 1850 and 1945. Policy goals, and instruments to put them into effect, emerged over that period which have profoundly influenced contemporary mineral policy and continue to do so. Three basic mineral policies can be identified in the post-1945 period: the mineral policy of growth, 1945-70; the mineral policy of redistribution, 1970-78; and the still-unfolding mineral policy of managing maturity.

Considerable overlap, of course, exists between the three post-war policies and each contains elements of the others; but the orientation of each policy is strikingly different. Moreover, while perennial themes and concerns run through the three – size of the industry, distribution of its benefits and costs – the central thrust and emphasis of each is distinct (see table 9, policies 1, 2 and 4, pp. 114-5).

The policy of growth, for example, focuses on quantitative expansion first and foremost, with the implied belief that private enterprise is the optimal means of generating such growth, and that the equitable distribution of its benefits to society as a whole will 'trickle down', in the form of more jobs, growing wages, and higher government revenues from mining. The policy of growth is ambivalent towards government intervention in mining. While it encourages the maximum government intervention in sharing the development costs of mining (by providing infrastructure and

fiscal incentives), it calls for minimum government intervention in the distribution of mining's benefits (trusting in this case to the efficient operation of the free market).

The policy of redistribution, on the other hand, is almost unequivocally interventionist. It focuses on maximizing the financial benefits of mining and, while it does not oppose growth, its policy instruments tend to have an inhibiting effect. Although it is not, properly speaking, a policy of managing maturity, its conception of the industry is that it is 'mature' enough to stand alone without government support. Historically, it has gone even further and operated on the assumption that mining is in a position to render direct support to other industries. Thus, the mineral policy of redistribution laid most emphasis on increasing the tax burden on the mining sector and capturing its 'economic rents', and channeling the proceeds via government revenues to other sectors of the economy and society. This was done, for example, by increasing government incentives to other industrial sectors, and increasing regulation of environmental and social aspects of mining.

Another policy that purports to respond to the new 'maturity' of the mining industry, the 'sunset' policy, is included in table 9 as policy 3, a hypothetical possibility rather than a policy which there has been any serious attempt to implement. The 'sunset' policy, like the policy of redistribution, is not a policy of maturity management *per se*. It is based on a second conception of 'maturity': far from being a vigorous and autonomous adult, as it suggests, some sectors of the mining industry are so 'mature' that they are in their death throes. Mining is therefore seen by some, in the popular jargon of the early 1980s, to be a 'sunset industry', and the role of the sunset mineral policy for those in trouble would be to help the sun to set with the minimum of disruption and pain. The closing of the Schefferville operations of the Iron Ore Company of Canada in 1982 presided over by the future Prime Minister, Brian Mulroney, was an example of a necessary adjustment policy taking into account new competitive realities.

The specific goals and instruments of such a policy, however, are largely academic, as the policy has not been – and is not likely to be – implemented in any sustained way. On the other hand, it should be pointed out that such a scenario is still being seriously considered in other sectors, for example in the case of Quebec's clothing and footwear industries. In spite of the enormous political problems of a sunset policy, serious declines in Canada's competitive position could make the policy more influential in the future. Even figures such as Donald Macdonald, chairman of the Royal Commission on the Economic Union and Development Prospects for

Table 9:

FOUR CANADIAN MINERAL POLICIES: A SCHEMATIC OUTLINE

Problem	Policy Response	
	Goal	Means
1. GROWTH (prevalent 1945-60)		
<i>Size of industry</i>	Maximizing size and rate of growth	- provision of infrastructure by government - encouragement of private investment by maximizing tax writeoffs, minimizing tax burdens - minimizing regulation of private companies
<i>Distribution of benefits of mining</i>	Indirect general diffusion through 'trickle-down' theory of growth	- private sector profits sufficient to attract ongoing flow of investment and development capital - increasing employment and higher wages - higher government revenues via the direct and indirect taxation of corporate profits
<i>Distribution of costs of mining</i>	Keep private sector's costs down	- minimizing regulation on employment conditions, waste disposal, land usage - minimizing private responsibility for social costs
2. REDISTRIBUTION (prevalent 1970-78)		
<i>Size of industry</i>	Stabilizing size, and preventing over-rapid contraction	- move from tax incentives to tax grants and subsidies - adjustment policies put incremental resources into diversifying regional economies rather than new resource projects
<i>Distribution of benefits of mining</i>	Capturing the benefits for the 'Canadian people as a whole'	- increase of taxation revenue from mining, greater capture of 'resource rents' - federal-provincial disputes over jurisdiction, tax space - increased regulation of foreign capital, employment conditions, corporations - reallocation of fiscal mining incentives and expenditures to the other sectors of the economy (e.g. higher technology) or society (e.g. social services) - federal and provincial support for selected mining projects based on regional criteria
<i>Distribution of costs of mining</i>	To make mining sector, rather than society as a whole, pay a greater share of the social costs of mining	- increased regulation of environmental and social aspects of mining - greater burden of infrastructural investment placed on private sector

Table 9 (continued)

Policy Response	
Goal	Means
3. SUNSET (hypothetical, never prevalent)	
Orderly phasing out of industry	- shutting down of plants, directly or via withdrawal of benefits and subsidies - withdrawing infrastructural provisions - withdrawing tax incentives and write-offs
Relocation of resources of mining to other industry sectors	- retraining labour forces and encouraging increased mobility - shifting 'tax expenditures' to other sectors - financial incentives to mining companies to diversify
Minimize social costs by contraction of industry	- creating disincentives to smelting and pollution even at the expense of production and further processing - curtailment of mining-related infrastructural expenditure
4. MATURITY MANAGEMENT (developing in early and mid 1980s)	
Selective expansion and stabilization	- greater use of technology, research and development to create or increase comparative advantage - co-ordination of public-private joint venture megaprojects - incentives to exploration and development, especially aimed at junior mining sector - diplomatic moves to maximize international market access. - move towards more neutrality in the tax system
Aligning benefits of mining with regional and industrial adjustment policies	- encouraging forward and backward linkages (e.g. mining machinery production) - encouraging regional diversification projects related to mining (e.g. mining machinery development in N. Ontario) - using mining experience for industrial spin-offs and the export of both goods and technology - procurement policies to create regional and high technology spinoffs
Minimize social costs by technological and educational innovation	- the development of technology for processing and smelting which makes them both cleaner and more economically efficient - joint government-industry financing of new environmental measures - retraining of labour force both for greater efficiency within the industry and adaptability to other industries

Canada, have recently publicly expressed scepticism about the future of Canada's resource industries, including mining.¹

There is yet a third definition of 'maturity', which is the basis of the fourth mineral policy outlined in table 9: the mineral policy of maturity management and exploration of synergies (for convenience 'the mineral policy of maturity and synergy management': 'synergy' is defined below, in the section on 'Synergy Management'). This policy has not yet been fully formulated or translated into reality but, it has been argued above, it is the direction in which Canadian mineral policy is hesitantly moving. Moreover, with some qualifications, it could be argued that it is the direction in which Canadian mineral policy should be moving. The history of previous mineral policies detailed above both helps us to identify what is new about the emerging contemporary policy and suggests some directions of development which may be fruitful.

The definition of 'maturity' on which the newly emerging mineral policy is based differs radically from the two definitions already considered. Canadian mining is now considered to be 'mature', not in the sense of 'autonomous' or 'dying', but in the sense that it is, to all intents and purposes, physically adult. Its rapid growth phase is now over. This does not mean that it will never resume growing, nor that rapid growth in specific sectors (such as gold production) is impossible. What it means is that, for the foreseeable future, mineral policy no longer has as its prime focus the management and coordination of growth. The industry's physical maturity means that much of its future development depends on the more efficient and coordinated use of its resources in a highly competitive world.

The Lessons and Limitations of History

The history of Canadian mineral policy is an ambiguous legacy for contemporary policy makers. It cannot be ignored, for all contemporary policy issues have a history which needs to be known if the present is to be fully understood. On the other hand, it is both common and dangerous to be trapped and limited by the horizons of the past. Any new mineral policy will inevitably contain a large number of elements of the old, but these will (or, at least, should) be transformed by changes in overall economic and social policies.

In Canada, definite new trends in these broader areas started appearing in the late 1960s, focusing sharply between 1978 and 1982 (see chapter 7).

1. *Toronto Globe and Mail*, 'No future for Canada as a hewer of wood, Macdonald concludes', 17 April 1984. Mining spokesmen reacted swiftly, criticizing members of the commission for suggesting that mining might be a 'sunset industry': 'These comments worry us deeply for they could so easily become self-fulfilling prophecies,' according to Tex Enemark, president of the Mining Association of British Columbia (*The Winnipeg Sun*, 30 May 1984).

The success of any new mineral policy will be largely dependent on the degree to which it is able to align itself with and influence the new developments in the general policy environment. This point, the importance and dangers of relying solely on past experience in the making of contemporary Canadian mineral policy, is worth underlining and elaboration. In chapter 4, for example, the federal-provincial report *Towards a Mineral Policy for Canada* was discussed. The report considered four policies which collectively contain virtually all the historical issues which had appeared in Canadian mineral policy until then. The four policies were presented, however, as *future options*. If one looks at these options through a lens focusing, for example, on contemporary trends in economic development policy overall, and maturity and synergy management in particular, it immediately becomes obvious that, while the 'options' (which are basically a résumé of historical issues and responses) may be helpful as building blocks for future policy, they are inadequate in themselves as alternative policy.

In concrete terms, the emerging mineral policy is served by two distinct new sets of policy instruments: productivity-related instruments and synergy-related instruments. They are, it should be emphasized, *policy instruments*, and not goals in themselves. The policy goals which the instruments are called up to serve will radically change the instruments' nature and impact. As with all policy instruments, they will have to adapt to changing policy goals.

Productivity Management

Mineral policy in the 1980s has to concern itself more directly with the technological and managerial development of mining, to increase both its efficiency and competitiveness. To do this it must develop or refine policy instruments such as research and development, as well as training and re-education of the entire industry (labour force, government bureaucracies and management). In 1974, *Towards a Mineral Policy for Canada* stressed, in its options three and four, the need for the industry to achieve greater financial returns and to conserve its resources. These two options built on traditional nationalist and fiscal concerns stretching back to the last century, and have a great deal in common with current concerns to increase the efficiency of mining operations from a base which is no longer expanding at the rate of previous years. The emphasis in 1974 on 'quality' of development rather than 'quantity' has considerable resonance for the 1980s.

The differences between the two sets of policies, however, are as important as the similarities. Then, the emphasis on quality of development largely referred to the goal of substantially increasing returns from mining to government and society through redistribution measures. Now the emphasis has shifted to seeking higher returns for both industry and

government-society, through intensified cooperation aimed at achieving technological innovations, managerial improvements and productivity breakthroughs.

The process of joint encouragement of innovation, education and productivity improvement has already begun, but is more honoured thus far in the intention than in the observance. Despite a genuine effort to coordinate federal and private sector research and development,² actual mining R&D expenditure by the federal government has apparently declined. Nor is it merely a problem of the amount of money spent, but more importantly one of coordination of the efforts of government and the private sector, and their reorientation towards productivity, competitiveness and the market.

The new federal Minister of Science and Technology, Thomas Siddon, talking of the broader role of R&D in the economy as a whole, has acknowledged some of the problems that remain to be resolved. Free to criticize his own department as it was under the previous Liberal government, he has expressed his disappointment in the failure of the Liberal regime to link the federal government's large (\$300 million) new laboratory capacity to the private sector:

to use these new facilities as centres from which to draw a spinoff of opportunities... On the other hand we can look at some of our old labs, where there's a lack of excitement and strategic orientation. The priorities and level of commitment to national goals is perhaps weaker in those institutions than in any other areas the government funds.³

He also said that the National Research Council may be destined to play a greater leadership role in the management of science and technological development, but would not get incremental funding until certain other challenges are met, such as more emphasis on technology transfer to the marketplace, tax incentives, and assistance to creative centres of excellence.

Siddon emphasized that the private sector had to play its part as well. He reiterated his government's commitment to doubling R&D expenditure over the next five years (from \$5 billion to \$10 billion), but transferred some of the onus to the private sector:

I hope a larger share than previously will come from the private sector. One serious problem is the traditional reluctance of industry in Canada to meet its share of the responsibility for doing research.

Nevertheless, government responsibility for coordination, he admitted, remains crucial:

2. Energy, Mines and Resources, Canada, *Mining, Mineral and Metals Technology, 1983 and the role of CANMET*, Ottawa, 1983. See chapter 7 above.

3. *Financial Post*, 27 October 1984: Question and answer interview.

There is a much greater proportion of R&D performed in the private sector in both the United States and Japan. But in those countries governments take a more methodical approach to managing and disposing of public funds, and to encouraging private investment through programs that promote increased linkages between the public and private sector.

Most of these general points about R&D are directly applicable to the mining sector. There is a clear need for the mineral policy of maturity management not merely to encourage governments to do more scientific and technological research, but also to harness this work to a greater extent to increase Canadian mining's productivity and ability to survive in a competitive new world. The new Minister's comments, perhaps understandably, were short on specifics.

One major issue of mineral policy intimately connected to the productivity and technology instruments discussed here is the politically-charged problem of acid rain. It is considered in chapter 7 in a slightly different context, that of the necessity for policy coordination between public and private sectors; but it should also be seen as an example of how traditional policy instruments, such as the research role of governments, have to be adapted and refined to meet changing goals.

Synergy Management

The other side to the major dual thrust of new policy instruments developing to meet the challenge of the contemporary mineral policy of maturity is 'synergy management'. 'Synergies' or external economies are achieved when the overall benefits of combining two elements or processes add up to more than their sum. A simple hypothetical example would be if the provision of a new road in the Canada Lands made possible the opening of a profitable new mine while simultaneously achieving some important new regional or military goal. The Roads to Resources program of the Diefenbaker government initiated in 1961 is an example of such a multi-faceted policy. It opened up nearly 5,000 kilometres of road in northern regions. The federal government has also contributed to mining and regional growth simultaneously by the provision of infrastructural support to mining ventures in numerous remote regions (e.g. Steep Rock Iron Mines during World War II and Pine Point, Cyprus Anvil and Nanisivik mines more recently).⁴

Synergy-related policy instruments include regional policy, trade and competition, and procurement policy. Historically, as *Towards a Mineral Policy for Canada* made clear in 1974, there are clear precedents for such mineral policy instruments. Option two of that report focused on the economic diversification and nationalist goals of mineral policy. The instru-

4. Patton, 'The Evolution of Canadian Federal Mineral Policies', pp. 217-218.

ments of such a policy are obviously related to procurement, regional, and trade policy, all of which contain significant elements of older mineral policies. They gain a new significance in the present, however, to the extent to which they are now being placed in the context of the proposed new overall economic development policy for Canada which emerged in embryo in the years 1978 to 1982.

PROCUREMENT POLICY

Some variant of procurement policy is almost unavoidable for Canada in the modern world, even if merely as a self-defensive measure. Britain (through its Offshore Supplies Office), Australia (through its Industrial Supplies Office) and others have all embarked on procurement policies which discriminate against potential Canadian and other suppliers. Canadian policy has to respond to such developments, but to avoid damaging Canada's international competitiveness in the process by unduly escalating mining costs.

Nevertheless, it should be emphasized that procurement policy under a policy regime of synergy management has to avoid degenerating into simple protectionism or a variant of import-substituting industrialization. It must be designed to exploit the latent synergies available through linking procurement guidelines via incentives rather than coercion to Canadian resource projects in a way which will provide long-term benefits of specialization, productivity improvement and export promotion.

If procurement policy is not directed at producing greater ongoing efficiency and cost-saving in Canadian mining, then it becomes mere protectionism. The historic goal of procurement regulation was protectionist. While it may have been justifiable at the time in terms of the vested interests of Canadian suppliers and of the fostering of infant industries, compulsory procurement cannot now be justified in terms of mineral (or industrial) policy. As a strictly protectionist measure, it would retard the adjustment of both the mining industry and its suppliers to the new competitive international marketplace, and, as such would have the opposite effect from the one it is now designed to serve.

The basic goal, whether one chooses to call it 'procurement' or not (some would regard the term as historically too linked with coercive policies), is to achieve better economic linkages between the producers and their Canadian suppliers. The most efficient way to do this, in the long run, is probably through the encouragement of joint innovation, research and development by producers and suppliers. Each should be encouraged or given incentives to cooperate with the other and realize whatever synergies are inherent in the situation.

REGIONAL POLICY

Similarly, new developments in regional policy have to be carefully considered in deciding whether they are genuinely synergistic innovations, combining the needs of mining and the regions in a dynamic way. There have been a number of structural and institutional innovations in regional resource policy which have created the possibility of a more creative and cooperative relationship between the federal and provincial governments in this contentious area.

The difference between a genuinely synergistic regional-mineral policy and the old-style federal handouts, which bought some gratitude from the regions and tacit cooperation from the provinces, is a subtle one. The Economic and Regional Development Agreements (ERDAs) and their mining offshoot, the subsidiary Mineral Agreements, seem to have had some success to date in improving uneasy federal-provincial relations in the resource area, but, from the point of view of mineral policy, this 'new' policy must be treated with some scepticism for the time being. Its overall effects have yet to prove themselves significantly different from those of the traditional handouts. Unless it succeeds in making synergistic linkages, regional policy will remain rooted in federal-provincial rather than mineral policy issues.

INTERNATIONAL MARKETING, TRADE, AND COMPETITION

Another area of potential importance in the mineral policy of maturity and synergy management is that of international marketing, trade, and competition. Although the physical expansion of the industry has slowed, it is still capable of producing far more than it can profitably sell at current prices. The major potential synergies here are all based on expanding government-industry cooperation. Governments, particularly the federal government, can play an important role in expanding the mining industry's access to international markets by focusing their diplomatic, information-gathering and dissemination resources on the problem.

This is an area in which the benefits of a definite mineral policy and committed government-industry cooperation are unambiguously clear. A number of measures have already been implemented, including the formation in January 1983 of a high level and active group, the MAC-EMR Subgroup on International Mineral and Metal Markets. This group has subdivided into task forces, doing research on various aspects of the industry (starting with a major study of copper marketing) and has focused, among other things, on identifying nontariff barriers to Canadian exports (14 such barriers in nine countries to date have been submitted to GATT by

the federal government). Of all the issues raised in EMR's *Mineral Policy: A Discussion Paper*, that of international marketing has been the most intensively followed up by joint industry-government initiatives.

Behind the issue of marketing stands the more intractable problem of improving Canadian productivity and relative comparative advantage. Only by fundamental changes in these areas can Canada's competitiveness be improved and the success of its marketing efforts be ensured. This, in turn, presupposes concerted policy initiatives in a number of areas in addition to the four – productivity, procurement, regional and trade – examined above.

Taxation Policy

Of the major additional policy areas, the most important is undoubtedly taxation policy. A number of taxation measures have been adopted recently to mitigate the plight of the depressed industry, notably the extension of carry-back and carry-forward provisions for losses, and the extension of the flow-through principle to allow producers and exploration companies to pass on (in effect, to sell) to investors the tax benefits and incentives for which the corporations are eligible but which they are unable to use, usually because they earn no profits!

Even here, it is difficult to distinguish between *ad hoc* policy responses to particular problems as they arise and the use of policy instruments in a coherent and sustained way to serve long term goals. To some extent, the recent tax changes appear to be simply further extensions of the government retreat which started in 1976 when it became clear that tax increases of the 1970s were more than the industry could bear. As such, the tax cuts or concessions have had a stimulative effect; but they may tend to stimulate capital investment in depreciable assets rather than to steer resources into technology-intensive innovations and productivity improvements.

This encourages a partial return to a *de facto* mineral policy of growth, rather than the establishment of a neutral and stable tax environment with rates held as low as possible and the minimum number of special exemptions or incentives. To some extent the policy can be justified as a stopgap rather than a long-term direction, a response to a cyclical rather than structural problem. The extremely debt-ridden and precarious state of mining company balance sheets means there is a limited capacity among the producers to invest in exploration and development. To accomplish the policy goal of renewed exploration and development, it is necessary therefore that someone else provide the funds. Private investors have the capacity to supply these funds, and tax policies such as the extension of the flow-through principle are designed to give them the incentive to channel funds into exploration and development.

The danger of restoring the tax regime of the old mineral policy of growth would be that, in some circumstances, it might slow the pace of

adjustment already under way in the mining industry. The mining industry, motivated by heavy losses, has probably adjusted faster to new world realities over the past two years than any other major Canadian industry. Sheer necessity, composed of a mixture of dismal metal and mineral prices, vicious international competition and, it should be emphasized, the absence of any significant safety-net or bailout programs from Canadian governments, has wonderfully focused the industry's efforts.

The success of the industrial restructuring can be measured in the very substantial cost cuts and productivity improvements that are emerging, with operating costs down as much as 30 percent.⁵ These improvements, however, have not been achieved without a great deal of pain, particularly in the drastic reductions in the labour force and in management (Falconbridge, for example, cut its head office staff by half in a year and its labour force at various Canadian and international operations by up to 48 percent). Given that the general consensus in industry is that Canadian mining's adjustment to the new world situation still has a long way to go, mineral policy has to be careful to continue to encourage the adjustment process.

Policy should, of course, continue to foster the industry, but it should be very selective of the type of support it provides. The flow-through principle, with which government is experimenting, could provide either the right or the wrong sort of support depending on its application. Its intention is excellent: to find a mechanism to help those companies not generating sufficient income against which to offset the exploration and development tax incentives to which they would normally be entitled. Generally, the need to offset incentives against income has discriminated against the smaller, 'junior', companies.

These are precisely the companies which, experience has clearly shown, are most efficient at discovering new, higher grade deposits.⁶ Given the need to develop new mines which are internationally competitive and the emphasis now being placed by the mineral policy of maturity management on increasing productivity (both in exploration and development), it is clearly important that the juniors be placed on an equal policy footing with

5. C. George Miller, 'Mines show signs dark days over' in *Financial Post*, 'Mining Update (Special Report)', 27 October 1984. The same report mentions a number of other examples, for example, Dome Mines' gold mine is expected to increase its productive capacity by 50 percent while its workforce increases by 22 percent; Kidd Creek's Timmins output per employee improved by 20 percent over the last two years. A month earlier, Falconbridge announced that its April 1984 prediction, that it would produce nickel at any average of \$ U.S. 1.99 a pound compared with \$ U.S. 2.32 the previous year, still held (*Northern Miner*, 27 September 1984).

6. *Mineral Policy: A Discussion Paper*, pp. 62, 64, 68-71. The larger, integrated companies generally accept that the juniors are more efficient per exploration dollar expended and have played an active part in helping the smaller companies make representations to government through the latter's umbrella organization, the Prospectors and Developers Association.

the large, integrated companies. The problem is to find a way of ensuring that the flow-through principle furthers mining exploration productivity rather than merely lining the pockets of the financial promoters of tax shelters. A similar principle was tried before and halted, according to the federal government, because of abuses, although the original idea had been an excellent one with great potential for increasing both equity and productivity in the industry.⁷ This should not be allowed to happen again.

In the longer run, many would argue that mineral taxation needs overhauling in much the same way that the Canadian tax system as a whole needs reform. The goal has been cogently expressed recently by the British Columbia Minister of Finance, Hugh Curtis:

There are two basic approaches to using taxation policy to pursue the goals of economic growth, economic diversity and job creation. One approach is to use the tax system as a direct tool to selectively stimulate specific activities or sectors of the economy. Taken to an extreme, this selective approach to tax policy would have numerous targeted tax reductions, exemptions and tax holidays.

The other approach is to use the taxation policy to establish a stable and neutral tax environment characterized by rates which are as low as possible, with few special exemptions or incentives. Taken to an extreme, this neutral approach would not promote specific sectors, or reward particular types of economic or social behaviour.⁸

Under a policy of adjustment and managing maturity, therefore, special tax incentives ought in the long run to be cut to a minimum in favour of a generally more neutral tax regime. There might, however, be an argument to retain tax incentives to improve productivity, especially those which are neutral as to industrial sector.

It should be emphasized, however, that no tax regime is ever likely to achieve true neutrality, in much the same way that no mineral policy could, or even should, aim at neutrality. Although the extremists among the believers in the efficiency of the Free Market and the Invisible Hand might argue that neutrality is possible, such an argument logically implies a complete lack of policy. The history of mineral policy reveals that, while there are good policies and bad policies, coherent and contradictory policies, there are nevertheless always policies. Even a policy of ostensible nonintervention inevitably favours some groups, and some directions of economic and social development, over others. No society has ever created,

7. William T. Cannon, 'New Mining Ventures: The Case for Preserving After Tax Financing', Centre for Resource Studies, Kingston, 1979; William T. Cannon, *Financing and Stabilization Policies in a Cyclical Industry: The Case of Inco in the Seventies*, Technical Paper No. 1 (Kingston: Centre for Resource Studies, 1981).

8. Hugh Curtis, *Taxation and Economic Development: Background information for a consultative process*, (Vancouver: British Columbia Dept. of Finance, 1984), p. 8.

or is likely to create, neutral mechanisms which obviate the need for real choices to be continually and perpetually made.

The choices are often made in a fairly subtle way, the implications of which might be beyond even the most intelligent layman. It has been argued, for example, that the U.S. tax system creates a *de facto* industrial policy favouring capital-intensive industries and discriminating against technology-intensive industries.⁹ It does this by steering investment toward industries that make more intensive use of depreciable assets and away from high technology industries where technical knowledge is the most important asset. The tax code thus penalizes a particular set of activities by omission rather than commission.

This argument is probably at least as true of Canada as the United States. Thus, if the major goal of the mineral policy of maturity and synergy management is greater competitiveness from a slower-growing resource base, and greater link-up of resource industries such as mining with high technology (both for spinoffs and to increase efficiencies in the industry itself), the formulators of mineral taxation have to seriously consider whether the tax system is advancing or hindering these goals.

This is not to argue that capital-intensity (and the incentives and write-off provisions which encourage it) are necessarily antithetical to either high technology or greater productivity: new technology obviously requires capital investment to be implemented. Nor is high technology a goal in itself. As Richard Bird, director of the Institute for Policy Analysis at the University of Toronto, has argued in the case of Ontario (a point which is valid for Canada as a whole):

Those concerned with Ontario's long-term future and with the maintenance of a viable manufacturing sector would seem better advised to focus on upgrading the skills and adaptability of the labour force to do better what we already do (such as serving the resource industries) instead of directing more resources into futile attempts to supplant assembly workers in electronics in Taiwan.¹⁰

The former Ontario Premier, Frank Miller, while more optimistic about the development of high technology areas such as electronics, acknowledged when he was Minister of Industry and Trade that technology is crucial to the survival of Ontario's traditional industries:

Many of these industries are in danger of becoming vulnerable to low-cost import competition and the drift to offshore production.¹¹

9. The Urban Institute, 'Taxation: Our *de facto* industrial policy', *Policy and Research Report*, vol. 14, no. 2, October 1984.

10. Toronto *Globe and Mail*, 'Tis folly to pretend high tech will mean new jobs in the end', 6 September 1984.

11. *Ibid.*

Clearly, then, it may be necessary to ensure that future tax and policy incentives have some effect on the type of factorial or sectoral development being promoted. An important decision has to be taken at the level of policy goals rather than instruments. The issue is not so much whether to encourage high technology, but what kind to encourage and to what end. If economic development policy generally continues to favour resource-led growth and synergy management, it seems obvious that a major use of high technology should be as a policy instrument to enhance the comparative advantage of mining and other resource industries where it exists and align them with general industrial adjustment, regional and stabilization policies.

Policy and the Private Sector

Mineral policies should not be (and generally are not) formulated by governments alone. The private sector in Canada plays an active part by making representations to governments, either directly via company-to-government contacts, or through producer organizations such as The Mining Association of Canada or the Prospectors and Developers Association. A good deal of these representations, however, confine themselves to reacting to government initiatives and are framed in fairly narrow terms, such as 'Your proposed policy change (or initiative) will have the following impact on our operations. We suggest the following amendments...'. The reaction of the Canadian mining companies to EMR's *Mineral Policy: A Discussion Paper* is a case in point, generally confining itself fairly narrowly to an unabashed posture of special pleading.¹²

Mining companies, of course, have both a right and a duty to speak up for their own special interests, as do a myriad of other interests in Canadian society. The importance of mining to the Canadian economy overall,¹³ however, arguably means that the mining industry has a right to go further than this. Governments in the developed countries generally are drawing back from the growing intervention of the 1960s and early 1970s, and this withdrawal, however partial, provides an opportunity for the private sector to get more involved in the policy-making process. It needs to aim at being more pro-active, participating in the setting of strategy, rather than con-

12. The industry reaction is examined in detail in Yudelman, *Canadian Mineral Policy Formulation*.

13. C. George Miller, former federal Assistant Deputy Minister of EMR and now Managing Director of the Mining Association of Canada, puts it this way, (*Financial Post*, 27 October 1984): 'Mining is one of the economy's cornerstones. It supplies jobs in all regions of the country, particularly in the more remote areas where other employment opportunities are few. It provides nearly half the tonnage of all goods shipped on Canada's railways and inland waterways. Mineral exports produce about 20 percent of the value of Canada's exports of goods.'

fining itself to the traditional reactive response, limiting its contribution merely to making special interest representations.¹⁴

Nor is this problem of mining industry reticence and short-sightedness confined to Canada. In Australia, according to a well-known mining entrepreneur, Sir Arvi Parbo, addressing the Australasian Institute of Mining and Metallurgy, the mining industry has fundamentally failed in its duty to communicate with the Australian public:

It has made a totally inadequate contribution to policy-making in Australia...the mining industry's experience underlines heavily that opting out of participating adequately in policy-making is just as serious (and perhaps more so) as neglecting the pursuit of efficiency and success in exploration and production, or whatever is the particular business of the enterprise.¹⁵

Sir Arvi was talking of both reactive and pro-active contributions to the mineral policy process. In Canada, the industry's reactive contributions are adequate. But it could learn a few important lessons in pro-active participation from its own history. Take for example the case of S.J. Ritchie, the original founder of the Canadian Copper Company, who was dropped from its board in 1891. Ritchie then began a long political campaign against Canadian Copper. He tried to enlist the support of Canadian governments and public by arguing that it was both economically possible and a national necessity to refine nickel in Canada. He very nearly succeeded in the short term, and in the long term Inco (into which Canadian Copper had been amalgamated) was indeed forced to start refining in Canada.¹⁶

The crucial point of Ritchie's representations to Canadian governments was his sensitivity to the broad goals (actual and potential) of Canadian mineral policy, and his willingness to structure his representations to make them consistent with these strategic Canadian goals. The resultant paradoxes were clear to all: particularly that he was an American advocating a policy of Canadian nationalism because of his own personal interests. Nevertheless, because his proposals expressed and further refined broader interests of Canadian mineral policy, they helped mobilize widespread support and set in motion a train of circumstances which was to introduce nickel processing in Canada, greater control of foreign multinational companies, and a greater share of mining revenue for the public purse.

The private sector of the mining industry in the 1980s once again has to concentrate on thinking strategically about mineral policy, just as Ritchie did in the 1890s. So, for that matter, do Canadian governments.

14. Yudelman, *Canadian Mineral Policy Formulation*, esp. p.66. See also Yudelman, *Mining and the Macdonald Commission*.

15. *Mining Review* (Australia) Issue 6, August 1984, p. 10.

16. O.W. Main, *The Canadian Nickel Industry*, esp. chapters 3 and 6. See above, chapter 2.

It has been argued above that the emerging mineral policy is one of maturity and synergy management which blends traditional mineral policy goals and instruments with current needs in order to:

- increase productivity and competitiveness;
- selectively stabilize or expand growth;
- align the benefits of mining with regional and industrial adjustment policies;
- minimize the social costs of mining by technological and educational innovation.

Even if these goals do achieve a consensus among the protagonists, it remains to put them into practice by specific policy means, or instruments. To do this will be at least as difficult as agreeing on goals, and equally essential.

The groundwork of a new mineral policy of managing maturity, appropriate to the 1980s, is being laid. Now, both governments and industry need to consider more fully the general goals which have been so tentatively articulated, and the policy instruments needed to put them into effect. They need to think through not only their own short-term interests, but the broader social and economic issues with which these narrow interests have to be consistent.

This is not to suggest that mining and mineral policy should be subordinated to some abstract 'general interest'. Canada's broader social and economic policy goals are themselves susceptible to change initiated by developments in mineral policy. Mineral policy should not merely be derived from Canadian economic development policy overall, but should make an active contribution to shaping that broader policy. Failure of relevant government departments and the mining industry to make this active contribution to overall economic policy would retard the development of both mineral policy and the mining sector in the 1980s and 1990s and demonstrate a tragic inability to learn one of the few really clear lessons that the history of mineral policy has passed down to us.

Appendix 1 Mining and the Canadian Constitution

The following are the major provisions affecting mining in the Constitution Act, 1982. The text consolidates amendments from 1867 to 1982.

Section 91: Powers of the Parliament

91. It shall be lawful for the Queen, by and with the Advice and Consent of the Senate and House of Commons, to make Laws for the Peace, Quiet, Order, and good Government of Canada, in relation to all Matters not coming within the Classes of Subjects by this Act assigned exclusively to the Legislatures of the Provinces; and for greater Certainty, but not so as to restrict the Generality of the foregoing Terms of this Section, it is hereby declared that (notwithstanding anything in this Act) the exclusive Legislative Authority of the Parliament of Canada extends to all Matters coming within the Classes of Subjects next herein-after enumerated; that is to say, —

1. The amendment from time to time of the Constitution of Canada, except as regards matters coming within the classes of subjects by this Act assigned exclusively to the Legislatures of the provinces, or as regards rights or privileges by this or any other Constitutional Act granted or secured to the Legislature or the Government of a Province, or to any class of persons with respect to schools or as regards the use of the English or the French language or as regards the requirements that there shall be a session of the Parliament of Canada at least once each year, and that no House of Commons shall continue for more than five years from the day of the return of the Writs for choosing the House: provided, however, that a House of Commons may in time of real or apprehended war, invasion or insurrection be continued by the Parliament of Canada if such continuation is not opposed by the votes of more than one-third of the members of such House.
- 1A. The Public Debt and Property.
2. The Regulation of Trade and Commerce.
- 2A. Unemployment insurance.
3. The raising of Money by any Mode or System of Taxation.

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4. The borrowing of Money on the Public Credit.
5. Postal Service.
6. The Census and Statistics.
7. Militia, Military and Naval Service, and Defence.
8. The fixing of and providing for the Salaries and Allowances of Civil and other Officers and the Government of Canada.
9. Beacons, Buoys, Lighthouses, and Sable Island.
10. Navigation and Shipping.
11. Quarantine and the Establishment and Maintenance of Marine Hospitals.
12. Sea Coast and Inland Fisheries.
13. Ferries between a Province and any British or Foreign Country or between Two Provinces.
14. Currency and Coinage.
15. Banking, Incorporation of Banks, and the Issue of Paper Money.
16. Savings Banks.
17. Weights and Measures.
18. Bills of Exchange and Promissory Notes.
19. Interest.
20. Legal Tender.
21. Bankruptcy and Insolvency.
22. Patents of Invention and Discovery.
23. Copyrights.
24. Indians, and Lands reserved for the Indians.
25. Naturalization and Aliens.
26. Marriage and Divorce.
27. The Criminal Law, except the Constitution of Courts of Criminal Jurisdiction, but including the Procedure in Criminal Matters.
28. The Establishment, Maintenance, and Management of Penitentiaries.

29. Such Classes of Subjects as are expressly excepted in the Enumeration of the Classes of Subjects by this Act assigned exclusively to the Legislatures of the Provinces.

And any Matter coming within any of the Classes of subjects enumerated in this Section shall not be deemed to come within the Class of Matters of a local or private Nature comprised in the Enumeration of the Classes of Subjects by this Act assigned exclusively to the Legislatures of the Provinces.

Section 92: Exclusive Powers of Provincial Legislatures.

92. In each Province the Legislature may exclusively make Laws in relation to Matters coming within the Classes of Subject next herein-after enumerated; that is to say, —

1. The Amendment from Time to Time, notwithstanding anything in this Act, of the Constitution of the Province, except as regards the Office of Lieutenant Governor.
2. Direct Taxation within the Province in order to the raising of a Revenue for Provincial Purposes.
3. The borrowing of Money on the sole Credit of the Province.
4. The Establishment and Tenure of Provincial Offices and the Appointment and Payment of Provincial Officers.
5. The Management and Sale of the Public Lands belonging to the Province and of the Timber and Wood thereon.
6. The Establishment, Maintenance, and Management of Public and Reformatory Prisons in and for the Province.
7. The Establishment, Maintenance, and Management of Hospitals, Asylums, Charities, and Eleemosynary Institutions in and for the Province, other than Marine Hospitals.
8. Municipal Institutions in the Province.
9. Shop, Saloon, Tavern, Auctioneer, and other Licences in order to the raising of a Revenue for Provincial, Local, or Municipal Purposes.
10. Local Works and Undertakings other than such as are of the following Classes:
 - (a) Lines of Steam or other Ships, Railways, Canals, Telegraphs, and other Works and Undertakings connecting the Province with any other or others of the Provinces, or extending beyond the limits of the Provinces;

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- (b) Lines of Steam Ships between the Province and any British or Foreign Country;
- (c) Such Works as, although wholly situate within the Provinces, are before or after their Execution declared by the Parliament of Canada to be for the general Advantage of Canada or for the Advantage of Two or more of the Provinces.
- 11. The Incorporation of Companies with Provincial Objects.
- 12. The Solemnization of Marriage in the Province.
- 13. Property and Civil Rights in the Province.
- 14. The Administration of Justice in the Province, including the Constitution, Maintenance, and Organization of Provincial Courts, both of Civil and of Criminal Jurisdiction, and including Procedure in Civil Matters in those Courts.
- 15. The Imposition of Punishment by Fine, Penalty, or Imprisonment for enforcing any Law of the Province made in relation to any Matter coming within any of the Classes of Subjects enumerated in this Section.
- 16. Generally all Matters of a merely local or private Nature in the Province.

Section 92A: Non-Renewable Natural Resources, Forestry Resources and Electrical Energy

- 1. In each province, the legislature may exclusively make laws in relation to
 - (a) exploration for non-renewable natural resources in the province;
 - (b) development, conservation and management of non-renewable natural resources and forestry resources in the province, including laws in relation to the rate of primary production therefrom; and
 - (c) development, conservation and management of sites and facilities in the province for the generation and production of electrical energy.
- 2. In each province, the legislature may make laws in relation to the export from the province to another part of Canada of the primary production from non-renewable natural resources and forestry resources in the province and the production from facilities in the province for the generation of electrical energy, but such laws may not authorize or provide for discrimination in prices or in supplies exported to another part of Canada.

3. Nothing in subsection (2) derogates from the authority of Parliament to enact laws in relation to the matters referred to in that subsection and, where such a law of Parliament and a law of a province conflict, the law of Parliament prevails to the extent of the conflict.
4. In each province, the legislature may make laws in relation to the raising of money by any mode or system of taxation in respect to
 - (a) non-renewable natural resources and forestry resources in the province and the primary production therefrom, and
 - (b) sites and facilities in the province for the generation of electrical energy and the production therefrom,
 whether or not such production is exported in whole or in part from the province, but such laws may not authorize or provide for taxation that differentiates between production exported to another part of Canada and production not exported from the province.
5. The expression 'primary production' has the meaning assigned by the Sixth Schedule.
6. Nothing in subsections (1) to (5) derogates from any powers or rights that a legislature or government of a province had immediately before the coming into force of this section.

The Sixth Schedule: Primary Production from Non-Renewable Natural Resources and Forestry Resources

1. For the purposes of section 92A of this Act,
 - (a) production from a non-renewable natural resource is primary production therefrom if
 - (i) it is in the form in which it exists upon its recovery or severance from its natural state, or
 - (ii) it is a product resulting from processing or refining the resource, and is not a manufactured product or a product resulting from refining crude oil, refining upgraded heavy crude oil, refining gases or liquids derived from coal or refining a synthetic equivalent of crude oil; and
 - (b) production from a forestry resource is primary production therefrom if it consists of sawlogs, poles, lumber, wood chips, sawdust or any other primary wood product, or wood pulp, and is not a product manufactured from wood.

Section 109: Provincial Ownership

109. All Lands, Mines, Minerals, and Royalties belonging to the several Provinces of Canada, Nova Scotia, and New Brunswick at the Union, and all Sums then due or payable for such Lands, Mines, Minerals, or Royalties, shall belong to the several Provinces of Ontario, Quebec, Nova Scotia, and New Brunswick in which the same are situate or arise, subject to any Trusts existing in respect thereof, and to any Interest other than that of the Province in the same.

Appendix 2 Departmental Responsibilities for Federal Policies, Actions and the Provision of Services Related to the Mineral Industry, as of 1981

Areas of influence ^a	Responsible Department ^b	
	Primary	Secondary
Direct Controls/Influence		
Incorporation, business practice	CCA	
Taxation		
– assessment and collection	Nat. Rev.	Finance, EMR
Regulatory controls		
– environmental	DOE	EMR, DFO
– health & safety	LAB	EMR, H&W, DREE
– ownership (FDI)	FIRA-ITC	EMR
– capital markets	Finance	FIRA, ITC, EMR
– competition policy	CCA	
Physical infrastructure	DREE	MOT
Marketing (trade)	ITC-EDC	Finance, External, EMR
Indirect Influence		
Investment climate (general)		
– fiscal (tax) policy	Finance	TBS
– monetary policy (interest rates and ex. rate)	Finance	Bank of Canada
– regional development	DREE	ITC, EMR
– industry strategy (minerals)	EMR	Finance, ITC
Pricing policies		
– transportation	MOT-CTC	
– energy	EMR	Finance
International Relations	External, ITC	EMR, CIDA
Services		
– manpower training	CEIC	
– technology development	EMR	
– geological information and mapping	EMR	
– financial information	EMR	
Policy Coordination	MSED, PCO	Finance, TBS, FPRO

Source: EMR documents.

Note: The reorganizations of 1982 and 1984 have somewhat altered the situation, but the complexity of intragovernmental organization required to formulate mineral policy, well illustrated above, has not changed.

Appendix 2 (cont'd.)

^a In the Yukon & Northwest Territories, DIAND has authority over mineral development. This authority is administered mainly by DIAND with some participation by the territorial governments.

^b Key to abbreviations: Government departments and agencies

CCA	Consumer and Corporate Affairs
CEIC	Employment and Immigration
CIDA	Canadian International Development Agency
CTC	Canadian Transport Commission
DFO	Fisheries and Oceans
DIAND	Indian Affairs and Northern Development
DOE	Environment
DREE	Regional Economic Expansion
DRIE	Regional and Industrial Expansion
EDC	Export Development Corporation
EMR	Energy, Mines and Resources
External	External Affairs
FIRA	Foreign Investment Review Agency
FPRO	Federal-Provincial Relations Office
H&W	Health and Welfare
ITC	Industry, Trade and Commerce
LAB	Labour
MOT	Transport
MSED	Ministry of State for Economic Development
Nat. Rev	Revenue Canada
PCO	Privy Council Office
TBS	Treasury Board

Appendix 3 List of Federal Legislation and Regulations with Application to Mining as of 1981

1. *Adult Occupational Training Act*
Adult Occupational Training Regulations
2. *Anti-Dumping Act*
Anti-dumping Regulations
Anti-dumping Forms Order
Anti-dumping Tribunal Rules of Procedure
3. *Appropriation Acts*
Adult Occupational Training Regulations
Development Tax and Redevelopment Tax Grant Regulations
Enterprise Development Regulations
Labour Mobility and Assessment Incentive Regulations
Manpower Mobility Regulations
Northern Mineral Exploration Assistance Regulations
N.W.T. Business Loans Regulations
Prospectors' Assistance Regulations
Yukon Territory Business Loans Regulations
4. *Arctic Waters Pollution Prevention Act*
Arctic Waters Pollution Prevention Regulations
Arctic Shipping Pollution Prevention Regulations
5. *Area Development Incentive Act*
Area Development Incentives Regulations
6. *Atlantic Region Freight Assistance Act*
Atlantic Region Freight Assistance Regulations
Atlantic Region Selective Assistance Regulations
Atlantic Regional Special Transportation Assistance Regulations
7. *Atomic Energy Control Act*
Atomic Energy Control Regulations
Uranium Information Security Regulations
8. *Canada Development Corporation Act*
CDC Government Shares Regulations

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9. *Canada Water Act*
Phosphorus Concentration Control Regulations
10. *Clean Air Act*
Ambient Air Quality Objectives Order, No. 1
Ambient Air Quality Objectives Order, No. 2
Asbestos Mining and Milling National Emission Standards Regulations
Chlor-Alkali Mercury National Emission Standards Regulations
Fuels Information Regulations, No. 1
Lead-free Gasoline Regulations, No. 1
Leaded Gasoline Regulations
Metallurgical Industries Arsenic Information Regulations
Metallurgical Industries Mercury Information Regulations
Secondary Lead Smelter National Emission Standards Regulations
11. *Combines Investigation Act*
Restrictive Trade Practices Commission Rules
12. *Canada Business Corporations Act*
Canada Business Corporations Regulations
13. *Customs Act*
Customs Duties Drawback Regulations
14. *Environmental Contaminants Act*
Chlorobiphenyl Regulations No. 1
15. *Excise Tax Act*
General Excise and Sales Tax Regulations
16. *Explosives Act*
Ammonium Nitrate and Fuel Oil Order
Explosives Regulations
17. *Export and Import Permits Act*
Export of Scrap Iron and Steel Permit
18. *Federal-Provincial Fiscal Arrangements and Established Programs Financing Act, 1977*
Federal-Provincial Reciprocal Taxation Agreement Payment Regulations

19. *Financial Administration Act*
Public Lands Leasing and Licensing Regulations
Metal Mining Liquid Effluent Regulations
Petroleum Refinery Liquid Effluent Regulations
Syncrude Remissions Order
20. *Fisheries Act*
Chlor-Alkali Mercury Liquid Effluent Regulations
Metal Mining Liquid Effluent Regulations
Petroleum Refinery Liquid Effluent Regulations
British Columbia Gravel Removal Order
Yukon Territory Gravel Removal Order
21. *Foreign Investment Review Act*
Foreign Investment Review Regulations
22. *Income Tax Act*
Income Tax Regulations
23. *Indian Act*
Indian Mining Regulations
24. *Industrial Research and Development Incentives Act*
Industrial Research and Development Incentives Regulations
25. *Canada Labour Code*
Coal Mines (CMBDC) Safety Regulations
26. *Northern Canada Power Commissions Act*
Northern Canada Power Commission Regulations
27. *Northern Inland Waters Act*
Northern Inland Waters Regulations
28. *Ocean Dumping Control Regulations*
Ocean Dumping Control Regulations
29. *Precious Metals Marking Act*
Precious Metals Marking Regulations
30. *Public Lands Grants Act*
Public Lands Mineral Regulations
31. *Railway Act*
Bituminous Coal Weighing Regulations

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32. *Regional Development Incentives Act*

Regional Development Incentives Regulations
Regional Development Incentives Regulations, 1974
Regional Development Incentives Designated Regions Order, 1974
Special Areas Order

33. *Territorial Lands Act*

Canada Mining Regulations
N.W.T. Mining, Land and Timber Districts Order
Territorial Coal Regulations
Territorial Dredging Regulations
Territorial Land Use Regulations
Territorial Land Regulations
Territorial Quarrying Regulations

34. *Dominion Water Power Act*

Dominion Water Power Regulations

35. *Yukon Placer Mining Act*

Yukon Gold Shipment Royalty Order
Yukon Placer Mining Prohibition Order, 1970
Yukon Placer Mining Prohibition Order, 1977 (No. 1)
Yukon Placer Mining Prohibition Order, 1970 (No. 2)

Source: EMR documents

Note: The position has changed somewhat since 1981, but the central point, well illustrated by this list, remains: government regulation of the industry is all-pervasive. This immeasurably affects the actual implementation of mineral policy and the formulation of new policy.

Appendix 4 The 1984 Canada – Newfoundland Subsidiary Agreement on Mineral Development

THIS AGREEMENT made in duplicate and is effective as of 1984.

BETWEEN HER MAJESTY IN RIGHT OF CANADA represented by the Minister of Energy, Mines and Resources ('Canada').

AND HER MAJESTY IN RIGHT OF NEWFOUNDLAND represented by the Minister of Mines and Energy ('Newfoundland').

WHEREAS Canada and Newfoundland entered into an Economic and Regional Development Agreement on 4 May 1984 which provides, in part, for the entering into of subsidiary agreements for

- (i) coordination of existing federal and provincial policies, programs or activities which support the measures to be implemented, including measures for human resource development;
- (ii) support, including financial assistance not available under other existing government programs;
- (iii) outlining the activities and responsibilities of each government with respect to the measure; and
- (iv) dividing the cost between each government and setting the maximum amount thereof to be incurred;

WHEREAS the mineral industry has been identified by Canada and Newfoundland as an important element of the economy of Newfoundland;

WHEREAS increased mineral exploration and development of mines and mineral resources are consistent with the joint planning now being undertaken by Canada and Newfoundland relating to broader social and economic development;

WHEREAS Newfoundland has been carrying out a plan of mineral development in Newfoundland to enable the more effective assessment and utilization of its mineral resources;

WHEREAS the Governor in Council by Order in Council, P.C. 1984-1369/5 of 18 April 1984, authorized the Minister of Energy, Mines and Resources to execute this Agreement on behalf of Canada;

AND WHEREAS the Lieutenant Governor in Council by Order in Council of, 1984, authorized the Minister of Mines and Energy to execute this Agreement on behalf of Newfoundland.

THEREFORE the Parties agree as follows.

1. *DEFINITIONS*

1.1 In this Agreement:

- (a) 'ERDA' means the Canada - Newfoundland Economic and Regional Development Agreement made on 4 May 1984;
- (b) 'Federal Minister' means the Minister of Energy, Mines and Resources or the Minister of State (Mines) of Canada and includes any person authorized to act on his behalf;
- (c) 'Fixed Assets' means tangible long-term assets such as land, buildings, or equipment;
- (d) 'Provincial Minister' means the Minister of Mines and Energy of Newfoundland and includes any person authorized to act on his behalf;
- (e) 'Management Committee' means the committee established pursuant to section 3;
- (f) 'Ministers' means the Federal and Provincial Ministers; and
- (g) 'Work' means the activities referred to in Schedules B and C.

2. *PURPOSES, OBJECTIVES, AND SUBJECT MATTER*

2.1 The principal purpose of this Agreement is to establish a framework for joint planning of the Work which has the objective of strengthening and diversifying the mineral industry sector of the provincial economy.

2.2 Canada shall undertake, either directly or through agents or contractors, in accordance with its law and policies, the parallel-delivered Program as set out as its share in Schedule A.

2.3 Newfoundland shall undertake either directly or through agents or contractors, in accordance with its law and policies, both the jointly-funded and the parallel-delivered Program as set out as its share in Schedule A.

3. *MANAGEMENT AND COORDINATION*

3.1 There shall be a Management Committee, responsible for the general administration and management of the Work, which shall include four members, two of whom are to be appointed by the Federal Minister, one being designated by him as co-chairman, and two of whom are to be appointed by the Provincial Minister, one being designated by him as co-chairman.

3.2 Two non-voting members may be appointed to the Management Committee pursuant to section 6.2.4 of ERDA.

3.3 The power, duties, and functions of the Management Committee are:

- (a) to approve all procedures in respect of its own meetings, including rules for the conduct of meetings and the making of decisions where the members are not physically present in one place;

- (b) to approve guidelines for the application for funding under this Agreement;
- (c) before each fiscal year starting with the fiscal year commencing on 1 April 1984 during which this Agreement is in effect, to recommend to the Parties a Work plan identifying which of the Projects referred to in Schedule B will be carried out in the year and by which Party, the date by which the Management Committee anticipates that those Projects will be completed, and the estimated Eligible Costs to be attributed to each Project in the year;
- (d) before each fiscal year starting with the fiscal year commencing on 1 April 1984 during which this Agreement is in effect, to approve a Work plan identifying which of the Projects referred to in Schedule C will be carried out in the year, the date by which the Management Committee anticipates that those Projects will be completed, the estimated Eligible Costs to be attributed to each Project in the year, a capital acquisition plan, a fixed asset plan, a services and overhead costs plan, and a publication plan;
- (e) to approve the establishment of technical, public information, and other sub-committees, as required;
- (f) to submit progress reports to Ministers annually prior to the annual meeting of ERDA Ministers referred to in section 6.2.6 of ERDA, or as requested;
- (g) to prepare financial statements for the purposes of section 6.2.6 of ERDA;
- (h) to ensure a full and free flow of information between the Parties;
- (i) to make available to government departments the results obtained under this Agreement to allow them to identify human, social, and economic development opportunities;
- (j) where it identifies significant human resources implications in respect of any Project, to develop a human resources plan for that Project;
- (k) to ensure the preparation of and to approve a communications strategy and program to serve the information requirements of the public and to encourage public awareness of the activities of both governments under this Agreement;
- (l) to approve promotional material released under this Agreement;
- (m) to recommend any transfer of Projects in Schedule A between the Parties;
- (n) to ensure that all contracts incorporate all relevant provisions of this Agreement;
- (o) to meet at least twice a year for the purposes of this Agreement;
- (p) to adopt such procedures, forms, reports, and guidelines that are consistent with this Agreement as it deems expedient and appropriate to achieve its purposes;

(q) to appoint co-secretaries as required to assist the Management Committee;

(r) to meet with representatives of federal and provincial departments or agencies or other persons as seems appropriate to facilitate cooperation and public good will in the management of the Agreement;

(s) to recommend to the Parties the addition, amendment, or deletion of any Project in Schedule B where it considers that the purposes and objectives of this Agreement would be furthered by that addition, amendment, or deletion;

(t) to approve the addition, amendment, or deletion of any Project in Schedule C where it considers that the purposes and objectives of this Agreement would be furthered by that addition, amendment, or deletion;

(u) to carry out any other duties, powers, or functions specified elsewhere in this Agreement or such as may be assigned to the Management Committee by the Ministers by agreement in writing; and

(v) to review the financial statements referred to in sections 7.12 and 7.13 and, when appropriate, to report to Ministers on the statements.

3.4 A quorum for all meetings of the Management Committee shall be two members of whom one shall be a member appointed by the Federal Minister and one shall be a member appointed by the Provincial Minister.

3.5 Decisions of the Committee shall be acted upon only if taken unanimously either by its members present and voting at a meeting or in accordance with paragraph 3.3(a).

3.6 Any matter with respect to which the Management Committee is not unanimous shall be referred to the Ministers, whose decision will be final.

3.7 The Management Committee shall continue to exist and operate during the twelve-month period following termination of this Agreement with the necessary powers to wind up the Agreement.

4. ADMINISTRATION

4.1 This Agreement shall commence on and take effect from 1 April 1984 and shall terminate on 31 March 1989 or such earlier date as may be agreed to in writing by the Ministers. No Project may be commenced after the termination date of this Agreement. Costs incurred during the twelve-month period following termination shall be Eligible Costs.

4.2 Each Project outlined in Schedules B and C shall be described in an appropriate Project authorization form which, *inter alia*, will provide for the Project name and description, its purpose and objectives, an outline of the way the Project is to be carried out and progress reported, and the annual and total cost of the Project.

5. *CONTRACT PROCEDURES*

- 5.1 Any contract awarded pursuant to this Agreement shall provide
- (a) that any member of the Management Committee, or a duly authorized representative, shall be permitted to inspect the subject matter of the contract at all reasonable times and
 - (b) for a suitable indemnity clause or insurance policy for the benefit of both Parties and their Ministers, officers, and employees.

6. *FINANCIAL – PARALLEL PROGRAMS*

- 6.1 Canada's expenditures in respect of the work to be carried out under the parallel programs referred to in Schedule B shall not exceed twelve million and one hundred thousand dollars (\$12,100,000).
- 6.2 Newfoundland's expenditures in respect of the work to be carried out under the parallel programs referred to in Schedule B shall not exceed three million and four hundred thousand dollars (\$3,400,000).
- 6.3 The amounts set out in each item in Schedule A to be expended by a Party are estimates only and may be varied by the relevant Party if the Total Parallel Expenditures by that Party is unchanged.
- 6.4 The provision of financing by Canada and Newfoundland for the implementation of this Agreement is subject to the existence of legislative authority for such financing for the fiscal year in which such financing is required.
- 6.5 'Eligible Cost' includes reasonable direct costs incurred by a Party for the purposes of the work to be carried out under the parallel programs referred to in Schedule B that are incremental to their normal operations and that are
- (a) invoiced to a Party under a contract made under this Agreement for goods or services,
 - (b) travel expenses of members of the Management Committee and of any sub-committee established pursuant to 3.3(e),
 - (c) any salary or benefits paid by a Party
 - (i) to employees hired specifically for managing or conducting Projects and
 - (ii) to permanent employees assigned full time to the management or conduct of Mineral Development Agreements under ERDA, where the assignment is approved by the Management Committee,
 - (d) costs of acquisition or modification of fixed assets if done specifically for a Project,
 - (e) cost for services performed by a Party that is the lesser of
 - (i) the normal rate for similar services performed for other users or
 - (ii) a reasonable imputed cost,
 - (f) field party costs,

- (g) where approved in advance by the Management Committee, any overhead costs of the Parties,
- (h) any cost overrun greater than twenty percent of the Eligible Costs estimated pursuant to paragraph (3.3(c) if
- (i) the Party implementing the Project giving rise to the overrun informed the Management Committee immediately it became aware that such a cost overrun was probable, and
 - (ii) the Management Committee approved the amount as an Eligible Cost, and
- (i) costs approved pursuant to section 6.6.

6.6 Where the Management Committee is satisfied that the acquisition of a fixed asset would not be timely enough for operational reasons or would not be cost effective, it may approve, as an Eligible Cost in relation to a fixed asset already owned or controlled by a Party, the lesser of a reasonable imputed cost based upon planned usage for any Project or the replacement cost.

6.7 The Parties will make best efforts to acquire or modify fixed assets that may be required for any Projects. The fixed assets are and remain the property of the Party which owned or acquired them.

6.8 Each Party will apply its payment procedures in respect of the Schedule B Projects assigned to it.

6.9 Each Party shall ensure that proper and accurate accounts and records are maintained, for three years following the termination date, with respect to each Schedule B Project it implements and shall make those accounts and records available to the other Party for inspection.

6.10 Each Party will provide to any member of the Management Committee on request all information that will indicate the work that has been undertaken or completed and the costs incurred with respect to any Schedule B Project.

7. FINANCIAL – JOINT PROGRAM

7.1 Canada's contribution in respect of the work to be carried out under the joint program referred to in Schedule C shall not exceed three million and two hundred thousand dollars (\$3,200,000). Canada shall further pay up to \$100,000 for costs incurred by Canada for the publication of the results of work carried out under the joint program.

7.2 Newfoundland's contribution in respect of the work to be carried out under the joint program referred to in Schedule C shall not exceed three million and two hundred thousand dollars (\$3,200,000).

7.3 The amounts set out in each item in Schedule A to be expended by Newfoundland on the joint program are estimates only and may be varied by the Management Committee if the Total Joint Expenditures by each Party are unchanged.

7.4 The provision of financing by Canada and Newfoundland for the implementation of this Agreement is subject to the existence of legislative authority for such financing for the fiscal year in which such financing is required.

7.5 'Eligible Cost' includes reasonable direct costs approved pursuant to paragraph 3.3(d) that are incurred by Newfoundland for the purposes of the work to be carried out under the joint programs referred to in Schedule C, are incremental to their normal operations, and are

- (a) invoiced to Newfoundland under a contract made under this Agreement for goods or services,
- (b) any salary or benefits paid by Newfoundland to employees while administering or conducting Projects,
- (c) costs of acquisition or modification of fixed assets,
- (d) cost for services performed by Newfoundland that is the lesser of
 - (i) the normal rate for similar services performed for other users or
 - (ii) a reasonable imputed cost,
- (e) field party costs,
- (f) any overhead costs of Newfoundland,
- (g) any cost overrun in excess of the Eligible Costs budgeted pursuant to paragraph 3.3(d) if
 - (i) Newfoundland informed the Management Committee immediately it became aware that such a cost overrun was probable, and
 - (ii) the Management Committee approved the amount as an Eligible Cost, and
- (i) costs approved pursuant to section 7.6.

7.6 Where the Management Committee is satisfied that the acquisition of a fixed asset would not be timely enough for operational reasons or would not be cost effective, it may approve, as an Eligible Cost in relation to a fixed asset already owned or controlled by Newfoundland, the lesser of a reasonable imputed cost based upon planned usage for any Project or the replacement cost.

7.7 Newfoundland will make best efforts to acquire or modify fixed assets that may be required for any Project. The fixed assets are and remain the property of Newfoundland.

7.8 Newfoundland shall submit to the Financial Officer, Mineral Policy Sector, Department of Energy, Mines and Resources, Canada, quarterly invoices listing and describing Eligible Costs incurred. Canada shall pay to Newfoundland fifty percent (50%) of Eligible Costs, subject to a maximum of \$3,200,000.

7.9 Newfoundland shall ensure that proper and accurate accounts and records are maintained, for three years following the termination date, with respect to each joint Project it is implementing and shall make those

accounts and records available to Canada for inspection and audit upon request.

7.10 Newfoundland shall provide to any member of the Management Committee on request all information that will indicate the work that has been undertaken or completed and the costs incurred with respect to any joint Project.

7.11 Newfoundland may apply for advances not exceeding a three-month cash flow forecast. Newfoundland shall account for advances before subsequent advances are issued. Newfoundland shall, within ninety days after the end of each fiscal year, return any advances not accounted for at the end of the fiscal year to the Receiver General for Canada through the Financial Officer, Mineral Policy Sector, Energy, Mines and Resources, Canada.

7.12 By 25 January of each fiscal year, Newfoundland shall provide to the Management Committee an interim financial statement containing expenditures and analysis of variances for the period from 1 April to 31 December, and a forecast of expenditures for the balance of the fiscal year.

7.13 By 1 July of each fiscal year including the twelve-month period following the termination of this Agreement, Newfoundland shall provide to the Management Committee a final audited financial statement for the previous fiscal year. In the event of early termination, Newfoundland shall provide to the Management Committee, within ninety days of termination, a final audited financial statement for each fiscal year or portion thereof.

8. *PUBLIC INFORMATION*

8.1 The Management Committee shall develop a system to disseminate technical information to the Parties and to the public within a reasonable period of time.

8.2 Any public announcement of the measures covered and of the products generated by this Agreement, as well as any official ceremony in respect of a Project, shall be arranged jointly by the Ministers.

8.3 The Parties will cooperate in public information activities relating to this Agreement. The planning of public information activities will be the responsibility of the Management Committee.

8.4 Publications arising out of this Agreement shall contain a prominent statement that the work was performed under this Agreement.

8.5 In all public information activities, the Parties will be guided by the principles that all interested persons should be kept informed, that the contributions of both Parties should be fairly acknowledged, and that both Parties should have a fair opportunity to participate.

9. *EVALUATION*

9.1 Prior to 31 December 1984, the Management Committee will develop a plan for evaluating the Work which will identify major evaluation criteria,

the character and timing of data collection, responsibilities for data collection, responsibilities for evaluation activities, and the timing and nature of any interim reports.

9.2 The Management Committee will submit a preliminary evaluation report to the Ministers between twelve and six months prior to the termination of this Agreement. The Management Committee will submit a final and comprehensive evaluation report to the Ministers within twelve months after the termination of this Agreement.

10. GENERAL

10.1 The Ministers may, in writing, amend any of the provisions of the Agreement except for sections 2.1, 2.2, 2.3, 3.7, 4.1, 4.2, 6.1, 6.2, 6.4, 7.1, 7.2, and 7.4.

10.2 The laws in effect in Newfoundland shall apply to this Agreement.

10.3 In carrying out its responsibilities under this Agreement the Management Committee will take account of the Federal Environmental Assessment Review Process and the Newfoundland Environmental Assessment Act.

10.4 Nothing in this Agreement is to be construed as authorizing one Party to contract for or to incur any obligation on behalf of the other or to act as agent for the other.

10.5 All property, including patents, copyrights, and other intellectual property and any revenue, acquired as a result of the Work shall be disposed of, licensed, or otherwise dealt with as the Ministers may from time to time determine.

10.6 This document and Schedules A, B, and C form the entire Agreement.

10.7 No member of the House of Commons of Canada or the House of Assembly of Newfoundland shall be admitted to any share or part of this Agreement or to any benefit arising herefrom.

IN WITNESS WHEREOF this Agreement has been executed on behalf of Her Majesty in right of Canada by the Minister of State (Mines) representing the Minister of Energy, Mines and Resources and on behalf of Her Majesty in right of Newfoundland by the Ministers of Mines and Energy and for Intergovernmental Affairs.

CANADA-NEWFOUNDLAND MINERAL DEVELOPMENT
AGREEMENT

SCHEDULE A

This Schedule lists the directly delivered Canada and Newfoundland programs and the jointly-funded Newfoundland delivered programs.

	Canada Funded and Delivered	Newfoundland Funded and Delivered	Jointly Funded Newfound- land Delivered
	(thousands of dollars)		
<i>GEOSCIENCE</i>			
Mineral Deposit Studies	2,585	—	—
Geological Investigations	1,045	200	—
Regional Geochemistry	1,090	—	—
Geophysics	1,470	400	—
Overburden Studies	1,760	400	—
Sand and Gravel		350	—
Support Services		600	—
Industrial Mineral Studies		—	370
Geological Mapping*		—	5,130
Analytical and Other Technical Services			1,000
Sub-Total	(7,950)	(1,950)	(6,500)
<i>MINING AND MINERALS TECHNOLOGY</i>			
Deposit Assessment	900	600	—
Concrete Alkali Studies	100	—	—
Iron Ore Pelletizing	500	—	—
Sub-Total	(1,500)	(600)	—

* See Section 7.1.

*ECONOMIC
DEVELOPMENT STUDIES*

Industrial Mineral Com-
modity and Industry
Studies

700 250 —

Competition and Productivity
Studies

550 — —

Sub-Total

(1,250) (250) —

*PUBLIC INFORMATION,
EVALUATION AND
ADMINISTRATION*

1,400 600 —

TOTALS

12,100 3,400 6,500

CANADA-NEWFOUNDLAND AGREEMENT ON
MINERAL DEVELOPMENT

SCHEDULE B

This Schedule outlines the work to be undertaken under the Agreement in the federal and the provincial programs that will be jointly planned by the Management Committee and carried out in parallel. The work falls into four major areas:

Geoscience

The geoscience component of the program will provide original information on the distribution of the economic minerals and host rocks within large areas of unexplored parts of Labrador and insular Newfoundland. These objectives will be realized through the activities listed below.

- (1) Investigations of selected significant mineral deposits, mines and closed-down mines and of their geological setting, to aid and stimulate industry exploration and to aid in discovery of new orebodies near mines, as well as regional metallogenic studies of mineral-rich terranes.
- (2) Geophysical investigations will be undertaken in regions chosen for their potential to contain significant mineral deposits and will dovetail with and contribute to various geoscientific projects to be undertaken in those regions.
- (3) Regional geochemical surveys of lake and stream sediments in Labrador to indicate areas of economic mineral potential in relatively unexplored regions.

Follow-up investigations will be undertaken in specific localities where regional surveys indicate potentially economic targets. The proposed investigations will be co-ordinated with bedrock studies to be undertaken through this program, and will complete the geochemical lake sediment coverage of that part of Labrador amenable to lake sediment surveys.

- (4) Investigations, mapping and paleontological investigations of bedrock formations in western Newfoundland to stimulate exploration activities.
- (5) Surveys of the glacial overburden, including the tracing of minerals through glacial dispersion in order to determine the displacement of economic minerals in till, sand and gravel.
- (6) Mapping and evaluation of sand and gravel deposits used in construction.

Mining and Minerals Technology

The technology program consists of three projects that will test mineral deposits and technologies with the object of identifying investment opportunities for the private sector.

(1) Deposit Assessment Project

A number of mineral deposits will be identified and subjected to pre-feasibility mineralogical, economic and market studies to determine their potential for development. A thorough examination, including metallurgical testing, of a selected few deposits will be made, where private industry indicated a willingness to participate in the investment.

(2) Concrete Alkali Studies

This testing program is designed to assess the behaviour of known deposits of aggregate when made into concrete.

(3) Iron Ore Pelletizing

This testing program will investigate new indigenous materials for use in forming iron ore pellets with the object of reducing costs and improving productivity in the iron ore and in the steel industries.

Such developments and trials cannot be carried out in isolation from the industry and hence maximum industrial cooperation for both experimental work and funding will be sought. It is intended to conduct most of the program through contracts with industry or equivalent organizations.

Economic Development Studies

Projects in this Sector represent a comprehensive approach to the identification of opportunities for and constraints to regional economic growth through the development of industrial mineral deposits.

The federal and provincial industrial minerals programs, which will be separately funded and parallel delivered, will assist in developing Newfoundland resources through the assessment of commodities, the use of industrial minerals by industry, new materials and transportation. Minerals of particular interest include: barite, building stones, clays, dolomite and limestone, gypsum, prophyllite and talc. The use of industrial minerals will be investigated in the following industries: refractories, gypsum wallboard and the demand for industrial minerals by the offshore industry. The impact of new materials technology and transportation issues on industrial minerals will be evaluated.

Studies will be carried out to identify opportunities by which the performance of the nonferrous metal and other parts of the mineral industry may be strengthened, and new opportunities found for mining employees and communities.

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Typical projects in this program could include, for example: in-depth analysis (including fact-finding missions) of the international market and competitive supply position for important minerals and metals produced in Newfoundland; the identification of specific problems affecting productivity and developing recommendations and actions to resolve them, including how to deal with the effects of productivity improvement and technological change on employees; identification of possible new mineral-related economic activities to help declining mining communities; studying federal and provincial policies and programs that influence the Province's mineral economy. Conferences and seminars could be sponsored as appropriate. As well, assistance will be available to specific firms, associations and institutions for projects that lead to an improved understanding of strategic issues and problems facing the industry and their efforts and to the identification, promotion and implementation of remedies. Care would be taken that projects do not duplicate or overlap other federal programs.

In all cases, the affected industry, firms, or even communities will be consulted in the design and implementation of the work program. Plans for individual projects in this program will be formulated by the Management Committee as the work progresses.

Public Information, Evaluation and Administration

Public information material to inform the general public about the programs and their benefits to the industry and the economy will be prepared and distributed. The results of the programs will be assessed in terms of the objectives.

CANADA-NEWFOUNDLAND AGREEMENT ON MINERAL DEVELOPMENT

SCHEDULE C

This Schedule outlines the work to be undertaken under the Agreement by Newfoundland in the jointly-funded geoscience program.

The work consists chiefly of bedrock mapping required to complement other geoscientific investigations in aiding and stimulating industry exploration. Areas selected are those with anticipated or known mineral potential and with inadequate information upon which industry can base exploration. The mapping is assigned high priority by both federal and provincial departments, and it follows both governments will combine to carry out the investigations jointly. Further, in recognition of the strong cadre of bedrock mapping geologists assembled by the Province and with many years of experience in the Province's geology, the provincial agency will deliver this geological mapping with joint federal and provincial funding. A subsidiary component of the jointly-funded work will provide essential geological information on industrial mineral deposits, also drawing upon developed provincial expertise. Part of the joint funding will cover incremental analytical and technical services provided through the existing provincial infrastructure in support of the above geoscientific work.

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